ASCE 1976

Journals (Proceedings)
Civil Engineering,
Transactions,
Manuals and Reports,
and
Miscellaneous Publications

$5.00 (net)

INDEX TO 1976 ASCE PUBLICATIONS

FOREWORD

The 1976 index, which provides a guide to information published by ASCE during 1976, combines material appearing in the Journals (Proceedings Vol. 102), CIVIL ENGINEERING (Vol. 46), Transactions (Vol. 141), Manuals and Reports, and Miscellaneous Publications.

The user will find all articles and papers dealing with specific subject areas listed under one or more appropriate subject headings suggested by the content and application of the paper. The Engineers Joint Council "Thesaurus of Engineering Terms" has been used as the primary source of index terms. The Water Resources Thesaurus of the U.S. Department of the Interior and the Micro-Thesaurus compiled by the Soil Mechanics and Foundations Division of ASCE were also used.

The Index can be used in conjunction with the information-retrieval cards printed in the front of each Journal and to the rear of CIVIL ENGINEERING. The bold key words on the information-retrieval cards are the words used as index terms in the 1976 Index.

The name index contains entries indexed under the names of author, co-authors, discussers, chairmen of committees preparing reports, and deceased members whose memoirs appeared in Transactions.

In the name index, the entry for a Proceedings Paper (under the first name if more than one author) is supplemented by information concerning the discussion, closure, and Transactions digest, if applicable. To find what discussion, if any, there has been for a Proceedings Paper located in the subject index, the reader looks under the entry for the first-named author in the name index. When discussion of a paper from a prior year is published, the original entry is repeated. Discussion over a period of time can be traced until the closure to the paper is located.

When the paper appears in Transactions, the complete entry including original paper, discussion, closure, errata (if applicable), and Transactions citation appears in the name index.

Typical abbreviations used herein are:

Dsc for discussion
Clo for closing discussion
Corr for corrections
Err for errata
Chmn for Chairman of a committee submitting a report
TR for Transactions
TN for Technical Note

Items indexed from ASCE Miscellaneous Publications have the following symbols in the references:

1. EFEEC—Engineering Foundation Conference on Civil and Environmental Aspects of Energy Complexes, August 3-8, 1975
2. GT-75—In-situ Measurement of Soil Properties, Vol. II, Specialty Conference of Geotechnical Engineering Division, Raleigh, N.C., June 2-4, 1975
3. SDNPF—Structural Design of Nuclear Plant Facilities, Vol. III, Chicago, Ill., Dec. 17-18, 1973
4. EFAN—The Constructed Environment with Man as the Measure, Engineering Foundation Conference, Nov. 3-8, 1974
5. OE75—Civil Engineering in the Oceans III, June, 1975, University of Delaware.
6. NMG—Engineering Foundation Conference, Numerical Methods in Geomechanics, June 20-25, 1976, Virginia Polytechnic Institute and State University, Blacksburg, Va.
7. GT76—Rock Engineering for Foundations and Slopes, Specialty Conference of the Geotechnical Engineering Division, Aug. 16-18, 1976, Boulder, Colorado
8. AWB—American Wooden Bridges, 1976
9. SREGM—A Comparative Study of Structural Response to Explosion-Induced Ground Motions, 1975
10. FTTC—Field Test Sections Save Cost in Tunnel Support, 1975
11. DIEE—Dredging and Its Environmental Effects, Mobile, Ala., Jan. 26-28, 1976
12. ST76—Methods of Structural Analysis, Specialty Conference of the Structural Division, Aug. 23-26, 1976, Madison, Wisc.
13. WW76—Rivers 76, Specialty Conference of the Waterways, Harbors and Coastal Engineering Division, Fort Collins, Colo., Aug. 10-12, 1976
14. PROD—The Civil Engineer's Role in Productivity in the Construction Industry, 1976
15. STN75—Structural Design of Nuclear Plants, Dec. 8-10, 1975, Vol. III

16. EFRLD—Responsibility and Liability of Public and Private Interests on Dams, Engineering Foundation Conference, Sept. 28-Oct. 3, 1975
17. IR76—Irrigation and Drainage Division Specialty Conference, Ottawa, Canada, July 21-23, 1976—Environmental Aspects of Irrigation and Drainage
18. BP75—Seminar on the Planning, Design and Implementation of Bicycle and Pedestrian Facilities, December, 1975

Preprints are indicated by the words Preprint and the preprint number and date. They were presented at ASCE National Meetings as follows:

Preprints	*Meeting*	*City*	*Date*
2633-2735	National Convention	San Diego, Calif.	April 5-8, 1976
2736-2821	National Convention and Exposition	Philadelphia, Pa.	Sept. 27-Oct. 1, 1976

Journal Abbreviations: Construction (CO), Engineering Mechanics (EM), Environmental Engineering (EE), Geotechnical Engineering (GT), Hydraulics (HY), Irrigation and Drainage (IR), Power (PO), Structural (ST), Surveying and Mapping (SU), Transportation Engineering (TE), Urban Planning and Development (UP), Waterways, Harbors and Coastal Engineering (WW), Water Resources Planning and Management (WR). Papers sponsored by the Department of Professional Activities appear in "Engineering Issues—Journal of Professional Activities" and are identified by the symbols (EI). Papers appearing in the Transportation Engineering Journal of ASCE include papers approved by the Aerospace, Air Transport, Highway, Pipeline and Urban Transportation Divisions.

The original publication can be found from the index entry as follows: Papers appearing in the Journals (Proceedings) are listed as:

GT7: July 76:721:12240

which would indicate a paper published in the Journal of the Geotechnical Engineering Division, July 1976 on page 721, as Proceedings Paper 12240.

The Transactions entry

TR: 141:385

indicates that the Digest appears in Transactions, Volume 141, on page 385.

Articles and news items published in CIVIL ENGINEERING are represented as:

CE: Mar 76:72

which states that the article appeared in CIVIL ENGINEERING in the March 1976 issue on page 72.

In addition to articles, the following Departments of CIVIL ENGINEERING are indexed: ASCE News, Engineers Notebook, The Readers Write, and The Younger Viewpoint.

Items indexed from Vol. 102 (1976) of the Journals are identified by months. The number of Journals published by a Division in 1976 can be obtained from the number after the last Division abbreviation i.e., GT12, Dec. 1976 identifies the twelfth issue of the Journal of the Geotechnical Engineering Division. The complete list of paper numbers and Journals for 1976 is as follows:

Month	Paper Numbers	CO	EM	EE	EI	GT	HY	IR	PO	ST	SU	TE	UP	WW	WR
Jan.	11815-11875				1	1	1		1	1					
Feb.	11876-11947		1	1		2	2			2		1		1	
Mar.	11948-12009	1				3	3	1		3					
Apr.	12010-12090		2	2	2	4	4			4					1
May	12091-12159					5	5			5		2		2	
June	12160-12222	2	3	3		6	6	2		6					
July	12223-12276				3	7	7			7					
Aug.	12277-12361		4	4		8	8			8		3	1	3	
Sept.	12362-12435	3				9	9	3		9					
Oct.	12436-12506		5	5	4	10	10			10					
Nov.	12507-12581					11	11		2	11		4		4	2
Dec.	12582-12648	4	6	6		12	12	4		12	1				

This annual index has been composed using magnetic tapes of all 1976 entries. To make future issues more useful, interested persons should submit their suggestions for further improvement to:

Information Services
ASCE
345 East 47th Street
New York, New York 10017

1976 ASCE SUBJECT INDEX

Abrasion Resistant Coatings
Protection of Piles: Steel, Concrete, Wood, Roney A. Heinz, CE:Dec 75:59

Absorbers
Vibration-Absorber Effect under Seismic Excitation, Richard G. Dong, ST10:Oct 76:2021:12495

Absorption
Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, Preprint No.2702, Apr 76, 30pp.
Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, WW4:Nov 76:455:12561
Performance of Single Household Treatment Units, Richard J. Otis and William C. Boyle, EE1:Feb 76:175:11895
Site Evaluation and Design of Seepage Fields, Kent A. Healy and Rein Laak, EE5:Oct 74:1133:10882
Water Quality and Aquitard Permeability, James H. Hardcastle and James K. Mitchell, IR2:June 76:205:12203

Abstracts
History of Indexing and Abstracting by the American Society of Civil Engineers, Irving Amron, Preprint No.2736, Sept 76, 25pp.

Abutments
Auburn-Foresthill Bridge Abutment Slope Stability, J. Lawrence Von Thun and Bruce M. Moyes, GT76:Aug 76:333
Finite Element Analyses of Arch Abutments, E. D'Appolonia, Donald E. Shaw, Jacques Richard and Daniel A. Raynaud, GT76:Aug 76:55
A Stability Study of a Concrete Arch Dam Rock Abutment, Edward C.K. Tom, Nestor T. Mirafuente and Efren Estrella, GT76:Aug 76:264

Accelerated Tests
Past and Future of Concrete Quality Control, Venkataswamy Ramakrishnan, CO2:June 76:263:12187

Acceleration
Seismic Design of Offshore Concrete Structures, Ben C. Gerwick, Jr. and Shighero Watanabe, Preprint No.2729, Apr 76, 8pp.

Accelerometers
Accelerometer Wave Recording Buoy, W. F. Baird and C. W. Glodowski, OE75:June 75:1104
Automatic Surveying — Updating Canada's Control, Leslie O'Brien, CE:Feb 76:57
Vertical Seismic Response Spectra, Paul C. Rizzo, Donald E. Shaw and Matthew D. Snyder, PO1:Jan 76:121:11858

Accelerometer Tests
Accelerometer Wave Recording Buoy, W. F. Baird and C. W. Glodowski, OE75:June 75:1104

Acceptability
Excelling as a Construction Contractor, Altaf Hussain, CO4:Dec 74:621:11029

Acceptance Tests
Test Loading of Piles and New Proof Testing Procedure, Bengt H. Fellenius, GT9:Sept 75:855:11551

Access Control
Access Control on Arterial Highways, John C. Glennon and Jamil A. Azzeh, TE1:Feb 76:75:11912

Accessibility
Airport Choice: An Empirical Study, Robert E. Skinner, Jr., TE4:Nov 76:871:12554

Accident Location
High-Accident Spot-Improvement Program, Kenneth R. Agent, John A. Deacon and Robert C. Deen, TE2:May 76:427:12123

Accident Prevention
Bicycle Accidents in the City of Milwaukee, Zuhair Abou-Loghd, Arun Chatterjee and Kumares C. Sinha, TE2:May 76:347:12120

Accidents
Porous Friction Course Solves Airport Hydroplaning Problem, Edward A. Johnson and Thomas D. White, CE:Apr 76:90
Reducing Construction Accidents—Top Management's Role, Raymond E. Levitt and Henry W. Parker, CO3:Sept 76:465:12384

Accident Studies
High-Accident Spot-Improvement Program, Kenneth R. Agent, John A. Deacon and Robert C. Deen, TE2:May 76:427:12123

Accreditation
Recommendations for Environmental Engineering Education, Wesley O. Pipes, EE2:Apr 74:243:10459
Trends in P.E. License Renewal Requirements, Robert D. Reckert, EI4:Oct 75:449:11667

Accuracy
Accuracy of Some Numerical Methods for Column Buckling, Paul Seide, EM5:Oct 75:549:11607
Experiments for Accuracy and Stability of Heat Conduction, Rao Yalamanchili, NMG:June 76:I-93

Acid Streams
Limestone Barriers to Neutralize Acidic Streams, Frank H. Pearson and Archie J. McDonnell, EE3:June 75:425:11382

Acid Treatment
Use of Crushed Limestone to Neutralize Acid Wastes, Frank H. Pearson and Archie J. McDonnell, EE1:Feb 75:139:11131

Acoustic Detection
Acoustic Emission Behavior of Granular Soils, Robert M. Koerner, Arthur E. Lord, Jr., W. Martin McCabe and John W. Curran, GT7:July 76:761:12239
Determining Bedrock Elevation by Acoustic Sounding Technique, Wesley E. Stimpson, Gary S. Brierley and Thomas K. Liu, GT76:Aug 76:1

Acoustic Detectors
Determining Bedrock Elevation by Acoustic Sounding Technique, Wesley E. Stimpson, Gary S. Brierley and Thomas K. Liu, GT76:Aug 76:1

Acoustic Equipment
Application of Acoustic Velocity Flowmeters, Cortland C. Lanning and Robert W. Ehrhart, Preprint No.2716, Apr 76, 19pp.

Acoustic Impedance
Acoustic Radiation of Submerged Vibrating Structures, Robert R. Smith and John T. Hunt, Preprint No.2711, Apr 76, 16pp.

Acoustic Measurement
Acoustic Radiation of Submerged Vibrating Structures, Robert R. Smith and John T. Hunt, Preprint No.2711, Apr 76, 16pp.

Acoustic Properties
Acoustic Radiation of Submerged Vibrating Structures, Robert R. Smith and John T. Hunt, Preprint No.2711, Apr 76, 16pp.
Concrete Material Response by Acoustic Spectra Analysis, Demeter G. Fertis, ST2:Feb 76:387:11943

Acoustic Signals
Concrete Material Response by Acoustic Spectra Analysis, Demeter G. Fertis, ST2:Feb 76:387:11943

Activated Sludge
Effects of Shock Temperature on Biological Systems, John L. Carter and William F. Barry, EE2:Apr 75: 229:11239
Philadelphia Pilots--Builds Oxygen Activated Sludge, Carmen F. Guarino, Michael D. Nelson and Allan B. Edwards, EE4:Aug 74:919:10722

Activated Sludge Process
Biosorption Isotherm for Uranium Recovery, Yishu Chu and James E. Zajic, TN: EE5:Oct 76:1109: 12442
Design and Operation Model of Activated Sludge, Joseph H. Sherrard and Alonzo W. Lawrence, EE6: Dec 73:773:10220
Design Graphs for Activated Sludge Process, Michael D. Mynhier and C. P.Leslie Grady, Jr., EE5:Oct 75:829:11659
Influence of Activated Sludge CRT on Adsorption, Byung R. Kim, Vernon L. Snoeyink and F. Michael Saunders, EE1:Feb 76:55:11937
Role of Nitrogen in Activated Sludge Process, Yeun C. Wu, EE5:Oct 76:12454
Temperature Effects on Aerobic Digestion Kinetics, Clifford W. Randall, James B. Richards and Paul H. King, EE5:Oct 75:795:11646
Trickling Filter-Activated Sludge Combinations, Robert F. Roskopf, James C. Young and E. Robert Baumann, EE5:Oct 76:1005:12460
Yeast Plant Wastewater Treatment, Yeun C. Wu and Chiao F. Kao, EE5:Oct 76:969:12468

Adaptation
Software Coordination in Geotechnical Engineering, Robert L. Schiffman and David M. Jubenville, NMG:June 76:II-1228

Adhesives
Wood Shear Panels Bonded with Flexible Adhesives, John A. Richards, Robert P. Kerfoot and Gordon P. Krueger, ST1:Jan 75:131:11056

Admixtures
Control of Expansive Concretes During Construction, Clyde E. Kesler, CO1:Mar 76:41:11968
Future Advances in Soil Placement and Improvement, J. Richard Bell, Preprint No.2775, Sept 76, 19pp.
Strength and Related Properties of Brick Masonry, Clayford T. Grimm, ST1:Jan 75:217:11066

Adsorption
Biosorption Isotherm for Uranium Recovery, Yishu Chu and James E. Zajic, TN: EE5:Oct 76:1109: 12442
Influence of Activated Sludge CRT on Adsorption, Byung R. Kim, Vernon L. Snoeyink and F. Michael Saunders, EE1:Feb 76:55:11937
Radial Dispersion Through Adsorbing Media, Anand Prakash, HY3:Mar 76:379:11995
Solution for Radial-Flow with Nonlinear Adsorption, Surendra P. Gupta and Robert A. Greenkorn, EE1: Feb 76:87:11901

Advertising
Ethics: Wisconsin Section Sparks Timely Discussion, Robert W. Brannan, CE:May 76:90

Aeration
Atmospheric Reaeration in a River Using Productivity Analysis, George M. Hornberger and Mahlon G. Kelly, EE5:Oct 75:729:11644
Cavitation Control by Aeration of High-Velocity Jets, Glenn L. Beichley and Danny L. King, HY7:July 75:829:11462
Comparative Study With Costs of Hypolimnetic Aeration, Arlo W. Fast, Marc W. Lorenzen and J. Harlan Glenn, EE6:Dec 76:1175:12629
Developing Region in Self-Aerated Flows, Robert J. Keller, K. K. Lai and Ian R. Wood, HY4:Apr 74: 553:10501
Discounted Cash Flow Analysis to Select Equipment, Richard Briller, EE3:June 76:595:12190
Oxnard-Hueneme Pipeline, Operation and Water Quality Problems, Richard A. Smith, Preprint No.2683, Apr 76, 8pp.
Some Features of Wind Action on Shallow Lakes, Robert B. Banks, EE5:Oct 75:813:11640
Synoptic Survey of Hypolimnetic Aeration, Arlo W. Fast and Marc W. Lorenzen, EE6:Dec 76:1161: 12628
Wastewater Ozonation: A Process Whose Time Has Come, Harvey M. Rosen, CE:Mar 76:65
Water to Air Bacterial Transfer by Bursting Bubbles, D. Wozniak, M. Kiwak, C. Cahoon and Robert H. Edgerton, EE3:June 76:567:12197

Aeration Tanks
Wastewater Ozonation: A Process Whose Time Has Come, Harvey M. Rosen, CE:Mar 76:65

Aerial Photographs
Classification and Analysis of River Processes, Rolf Kellerhals, Michael Church and Dale I. Bray, HY7: July 76:813:12232

Aerial Photography
Civil Engineering Applications of Remote Sensing, David J. Barr and Wesley P. James, TE2:May 75: 279:11300
Control Densification by Analytic Photogrammetry, Wesley V. Hull, SU1:Oct 75:11:11624
Landslide Hazard Mapping on a Shoestring, Clarence B. Drennon and William G. Schleining, SU1:Oct 75:107:11655
Recycling Older Buildings Preserves History, Saves Money, Harold H. Franke, CE:Oct 75:55
Remote Sensing of Mississippi River Characteristics, James F. Ruff, Morris M. Skinner, Brien R. Winkley, Daryl B. Simons and Dennis E. Dorratcague, WW2:May 76:189:12150
Satellite Measurements of Turbidity of Coastal Waters, Edward Yost, OE75:June 75:1170
Surface Currents in the Arctic and Sub-Arctic Seas as Deduced from Satellite Photographs of Ice Floes, Paul E. La Violette, OE75:June 75:1166
Use of Satellite Data in Urban Hydrologic Models, Robert M. Ragan and Thomas J. Jackson, HY12: Dec 75:1469:11790

Aerial Reconnaissance
Responsibility and Liability of Public and Private Interests on Dams, Jerry Phelan, EFRLD:Sept 75: 63

Satellites Helping Solve Some Down-to-Earth Civil Engineering Problems, CE:Aug 75:49

Aerial Surveys
A Decade of Research in Surveying and Mapping, Morris M. Thompson, SU1:Oct 75:1:11626
Image Error and Photogrammetric Requirements, G. Warren Marks, SU1:Dec 76:39:12607
New Procedure for Numerical Relative Orientation, Santosh K. Mahajan, SU2:Nov 74:155:10962
Surveying-Mapping Research from Earth Satellites, Charles K. Paul, SU1:Oct 75:27:11628

Aerial Transit Systems
Engineering the First Mass Transit Tramway, Richard L. Tomasetti and David I. Ozerkis, CE: Nov 75:65

Aerobic Conditions
Effect of Drainage on the Subsidence of Organic Soil, Ross W. Irwin, IR76:July 76:211

Aerobic Treatment
Temperature Effects on Aerobic Digestion Kinetics, Clifford W. Randall, James B. Richards and Paul H. King, EE5:Oct 75:795:11646

Aerodynamic Loads
Aerodynamic Investigations of In-Line Slender Towers for Heavy Water Plants, K. R. Cooper, H. P.A.H. Irwin and R. L. Wardlaw, ST76:Aug 76:286

Aerodynamics
Adverse Wind Loading Induced by Adjacent Buildings, Jon A. Peterka and Jack E. Cermak, ST3:Mar 76:533:11980
Binary Flutter of Suspension Bridge Deck Sections, Yasuharu Nakamura and Takeshi Yoshimura, EM4: Aug 76:685:12327
Mean Wind Loading on Rough-Walled Cooling Towers, Cesar Farell, Oktay Guven and Federico Maisch, EM6:Dec 76:1059:12647
Prediction of Wind Wave Heights, Henry T. Falvey, WW1:Feb 74:1:10324
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, Preprint No.2687, Apr 76, 28pp.
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, EM6:Dec 76:1041: 12640
Recent Aerodynamic Studies of Long-Span Bridges, Richard H. Gade, Harold R. Bosch and Walter Podolny, Jr., ST7:July 76:1299:12233
Resonance Phenomena Due to Turbulent Boundary Layer Excitation of Elastic Surfaces, Robert L. Ash and R. Balasubramanian, Preprint No.2726, Apr 76, 28pp.

Aerodynamic Stability
Yaw Effects on Galloping Instability, Rudolf Skarecky, EM6:Dec 75:739:11759

Aeroelasticity
Torsional Flutter of Rectangular Prisms, Yasuharu Nakamura and Taketo Mizota, EM2:Apr 75:125: 11226

Aerospace Engineering
The Aerospace Industry and the Civil Engineer, W. James King and Donald McDonald, Preprint No.2808, Sept 76, 20pp.
Measuring Watershed Land-Use Changes with Airphotos, Donald B. Stafford, James T. Ligon and M. Eugene Nettles, TE1:Feb 76:117:11925
The Space Program's Contribution to Our Bicentennial, George Edwin Shofner, Jr., Preprint No.2772, Sept 76, 24pp.

Aerospace Industry
The Aerospace Industry and the Civil Engineer, W. James King and Donald McDonald, Preprint No.2808, Sept 76, 20pp.
The Space Program's Contribution to Our Bicentennial, George Edwin Shofner, Jr., Preprint No.2772, Sept 76, 24pp.

Aero-Space Transport
Planning Air Transport Network in Appalachia, Everett C. Carter and Edward K. Morlok, TE3:Aug 75:569:11499
Structural Design of Large Space Telescope, Gerald W. Arnts, Jr., TE2:May 76:363:12132

Aggradation
Mississippi River Regime Analysis, Wallace H. Walters, Jr., WW76:Aug 76:730

Aggregates
Durability Tests on Some Aggregates for Concrete, L. Srinivasa-Iyer, Perry M. Rahn, Venkataswamy Ramakrishnan and James E. Russell, CO3:Sept 75: 593:11574
Early Developments in American Concrete, Russell S. Fling, Preprint No.2791, Sept 76, 24pp.
Fifty-Year Developments in High Strength Concrete, Colin D. Johnston, CO4:Dec 75:801:11757
Gap-Graded Concrete for Paving Construction, Ram Kinkar Ghosh and Mukul Ranjan Chatterjee, CO1: Mar 76:227:11988
Practical Refuse Recycling, C. Edward Walter, EE1: Feb 76:139:11941
Return of Fines from Commercial Dredging to the Ohio River, James C. North and John Clark, DIEE:Jan 76:593
Rutting Failure in Full-Depth Asphalt Pavement, Jacob Greenstein and Moshe Livneh, TE4:Nov 75: 737:11690
Significance of Variably Confined Triaxial Testing, John J. Allen and Marshall R. Thompson, TE4:Nov 74:827:10911
Surface Texture of British Concrete Pavements, William E. Murphy and David P. Maynard, TE1: Feb 75:115:11107
Synthetic Aggregate From Incinerator Residues, Horace R. Blank, EM1:Feb 76:31:11898

Aging
Strain Hardening and Aging in Cold-Formed Steel, Kenneth W. Karren and Mahendrasinhji M. Gohil, ST1:Jan 75:187:11067

Agricultural Engineering
Effluent Irrigation of Pearl Millet, Allen R. Overman, EE2:Apr 75:193:11233
Effluent Irrigation of Rye and Ryegrass, Allen R. Overman and Hsiao-Ching Ku, EE2:Apr 76:475: 12035
Sprinkler Uniformity Measures and Skewness, Fazal H. Chaudhry, IR4:Dec 76:425:12620

Agricultural Products
Environmental Implications of Increased Agricultural Production in International River Basins, Peter J. Reynolds, IR76:July 76:394

Agricultural Wastes
Concepts in the Control of Nonpoint Water Pollution, M. H. Frere, David A. Woolhiser, J. H. Caro, B. A. Stewart and W. H. Wischmeier, Preprint No.2667, Apr 76, 24pp.
Feedlot Wastes to Useful Energy — Fact or Fiction?, Lawrence A. Schmid, EE5:Oct 75:787:11647
Simulation of Agricultural Runoff, Anthony S. Donigian, Jr. and Norman H. Crawford, Preprint No.2670, Apr 76, 27pp.
208: A Process for Water Quality Management, Mark A. Pisano, CE:Nov 76:55

Agricultural Watersheds
Impact of Urban Utility Corridors on Agricultural Drainage, G. V. Eades, A. M. Shady and Robert S. Broughton, IR76:July 76:155
Nonpoint Source Pollution from Agricultural Runoff, Douglas A. Haith and John V. Dougherty, EE5:Oct 76:1055:12481

An Overview of Environmental Effects of Agricultural Drainage in Canada, Frank R. Hore and Robert S. Broughton, IR76:July 76:138
Water Yield Model Using SCS Curve Numbers, Jimmy R. Williams and William V. LaSeur, HY9: Sept 76:1241:12377

Agriculture

Agricultural Benefit Assessment from Flood Control, Krishan P. Singh, IR76:July 76:264
Estimating Stock Water Use in Rural Water Systems, Robert S. Schulz and T. Al Austin, HY1:Jan 76:15: 11843
Food and Agricultural Policies, Earl O. Heady, Preprint No.2754, Sept 76, 16pp.
Simulation Model for Evapotranspiration of Wheat: Empirical Approach, Daniel Shimshi, Dan Yaron, Eshel Bresler, Mordechai Weisbrod and Gad Strateener, IR1:Mar 75:1:11170
Simulation Model for Evapotranspiration of Wheat: Effect of Evaporative Conditions, Gad Strateener, Dan Yaron, Eshel Bresler and Daniel Shimshi, IR1: Mar 75:13:11169
Water Quality Aspects of Agricultural and Urban Drainage, Philip B. Bedient and William G. Characklis, IR76:July 76:374
2020 Hindsight; Another Fifty Years of Irrigation?, Daniel A. Dreyfus, IR2:June 75:87:11363

Agronomy

Subsurface Drainage Related to Agronomic Factors on Brookston Clay Soil, E. F. Bolton and Frank R. Hore, IR76:July 76:221

Air Bubbles

Removal of Air from Water Lines by Hydraulic Means, Paul E. Wisner, Farrukh N. Mohsen and Nicholas Kouwen, HY2:Feb 75:243:11142
Spillway Modification to Reduce Gas Supersaturation, Peter M. Smith, WW76:Aug 76: 667
Water to Air Bacterial Transfer by Bursting Bubbles, D. Wozniak, M. Kiwak, C. Cahoon and Robert H. Edgerton, EE3:June 76:567:12197

Air Chambers

Construction of FFTF Containment Vessel and Lock, Robert N. Lebre, CO2:June 76:325:12177

Aircraft

Resonance Phenomena Due to Turbulent Boundary Layer Excitation of Elastic Surfaces, Robert L. Ash and R. Balasubramanian, Preprint No.2726, Apr 76, 28pp.
Response of Flexible Pavements to Multiple Loads, Yu Tang Chou, Ronald L. Hutchinson and Harry H. Ulery, Jr., TE2:May 75:247:11307
Scale Model Study of Los Angeles International Airport, Richard G. Cann, TE3:Aug 75:455:11489
Strategies for Alleviating Impact of Aircraft Noise, Adib Kanafani and Abdullah Mogharabi, TE4:Nov 75:657:11715

Aircraft Noise

Strategies for Alleviating Impact of Aircraft Noise, Adib Kanafani and Abdullah Mogharabi, TE4:Nov 75:657:11715

Air Entrainment

Air-Entrainment in High Head Gated Conduits, Hari R. Sharma, HY11:Nov 76:1629:12523
Cavitation from Surface Irregularities in High Velocity, James W. Ball, HY9:Sept 76:1283:12435

Air Pollutants

Air Pollution Impact of Railroad Electrification, Hal B.H. Cooper, Jr., Hoy A. Richards and Aaron T.B. Lam, EE4:Aug 76:723:12312

Air Pollution

Air Pollution Factors in the Planning of Energy Complexes, Maynard E. Smith, EFEEC:Aug 75:211
Air Quality Management through Land-Use Measures, Ronald A. Venezia, UP1:Aug 76:95: 12350
Civil and Environmental Engineering Aspects of Energy Complexes, Alvin S. Goodman, Editor, EFEEC:Aug 75
Clean Air Equals Dirty Water, Donald C. Tillman and Robert C. Horii, EE1:Feb 75:87:11125
Complex Source Regulation in Philadelphia, William C. Miller, Preprint No.2778, Sept 76, 24pp.
Design and Management of Air Monitoring Surveys, Terry L. Miller and Kenneth E. Noll, EE4:Aug 76: 821:12344
Dispersion of Pollutants in Automobile Wakes, Dennis D. Lane and James J. Stukel, EE3:June 76: 571:12189
Evaluating Air Pollution Impacts of Transportation, Edward C. Sullivan, TE4:Nov 75:763:11721
Flue Gas Scrubbing at Eddystone Station, George Kotnick, Preprint No.2779, Sept 76, 24pp.
Impact of Air Quality on Bicyclists, Eugene E. Burr and Terry L. Miller, BP75:Dec 75:571
Integrated Evaluation from a Regional Perspective, Jane Rodgers and George V. Wickstrom, UP1:Aug 76:125:12338
Integrated Evaluation Programs, Irving Hand, UP1: Aug 76:117:12334
Measured Versus Predicted Air Quality Near Highways, Terry L. Miller and Kenneth E. Noll, EE3:June 76:627:12195
NO_x Emissions from Stationary Combustion Sources, James J. Stukel, Chmn., EE3:June 74:641:10581
Optimization of Urban Air Monitoring Networks, William P. Darby, Paul J. Ossenbruggen and Constantine J. Gregory, EE3:June 74:577:10577
San Francisco Bay Area Parking Management Plan, John B. Peers and Oreste M. Bevilacqua, TE4:Nov 76:821:12544
Solid Waste Management at Energy Complexes, David R. Berg, EFEEC:Aug 75:201
Transportation, Land Use, and Air Quality Programs, Charles E. Dare, TE2:May 76:411:12124
Vegetation and Urban Environment, Asadullah Zulfacar, UP1:May 75:21:11283

Air Pollution Control

Air Pollution Factors in the Planning of Energy Complexes, Maynard E. Smith, EFEEC:Aug 75:211
Complex Source Regulation in Philadelphia, William C. Miller, Preprint No.2778, Sept 76, 24pp.
Dispersion of Pollutants in Automobile Wakes, Dennis D. Lane and James J. Stukel, EE3:June 76: 571:12189
Flue Gas Scrubbing at Eddystone Station, George Kotnick, Preprint No.2779, Sept 76, 24pp.
NO_x Emissions from Stationary Combustion Sources, James J. Stukel, Chmn., EE3:June 74:641:10581

Air Pollution Dispersion

Dispersion of Pollutants in Automobile Wakes, Dennis D. Lane and James J. Stukel, EE3:June 76: 571:12189

Air Pollution Laws

Complex Source Regulation in Philadelphia, William C. Miller, Preprint No.2778, Sept 76, 24pp.

Air Pollution Monitoring

Measured Versus Predicted Air Quality Near Highways, Terry L. Miller and Kenneth E. Noll, EE3:June 76:627:12195

Airport Access

Airport Choice: An Empirical Study, Robert E. Skinner, Jr., TE4:Nov 76:871:12554

Airport Location

The Dallas/Fort Worth Airport Project, Raymond J. Hodge, EFAN:Dec 74:220
Multiple Criteria Theory and Airport Site Evaluation, John J. Jarvis, V. Ed Unger, Charles C. Schimpeler and Joseph C. Corradino, UP1:Aug 76:187:12353
Pilots Evaluation of the D/FW Airport, Woody Lockhart, EFAN:Dec 74:201

Airport Runways
Airport Upgrading Versus Landing Gear Optimization, Fletcher H. Griffis and M. A. Gammon, TE2:May 76:313:12137
Pavement Applications for Steel Fibrous Concrete, David R. Lankard and Alvin J. Walker, TE1:Feb 75:137:11108
Pilots Evaluation of the D/FW Airport, Woody Lockhart, EFAN:Dec 74:201

Airports
Air Passenger Handling Facilities: Future Planning-Design Impacts, Hanan A. Kivett, Chmn., TE3:Aug 76:461:12289
Airport Choice: An Empirical Study, Robert E. Skinner, Jr., TE4:Nov 76:871:12554
Airport Upgrading Versus Landing Gear Optimization, Fletcher H. Griffis and M. A. Gammon, TE2:May 76:313:12137
Conference Review and Evaluation, David G. Ellingson, EFAN:Dec 74:287
The Constructed Environment with Man as the Measure as Part of the Quality System in Construction, Cabell Gwathmey, Chmn., EFAN: Nov 74
The Dallas/Fort Worth Airport Project, Raymond J. Hodge, EFAN:Dec 74:220
The Dallas/Fort Worth Airport Project, Raymond J. Hodge, Preprint No.2703, Apr 76, 10pp.
Design of the D/FW Airport Terminals for the Public, Tom Bear, EFAN:Dec 74:197
Full-Depth Asphalt Airfield Pavements, Matthew W. Witczak and James F. Shook, TE2:May 75:297: 11331
Gate-Arrival Terminals—Solution for Air Cargo?, Francis Chin, Richard de Neufville and Jorge Rebelo, TE1:Feb 76:47:11890
Hawaii's Offshore Runway, Wayne L. Rickerd, Preprint No.2696, Apr 76, 19pp.
Integrated Grant Administration Program, Roland M. Lewis and Johannes W. Kurz, TE1:Feb 75:155: 11110
Lake Erie Airport Study — A Status Report, Herbert R. Crawford, Preprint No.2635, Apr 76, 27pp.
Method for Designing Airport Terminal Concepts, John P. Braaksma and John H. Shortreed, TE2: May 75:321:11308
Multiple Criteria Theory and Airport Site Evaluation, John J. Jarvis, V. Ed Unger, Charles C. Schimpeler and Joseph C. Corradino, UP1:Aug 76:187:12353
The New Montreal International Airport, G. Y. Sebastyan, CO2:June 75:317:11346
New York Offshore Airport Feasibility Study, Lawrence Lerner, Preprint No.2634, Apr 76, 25pp.
Passenger Evaluation of D/FW Airport, James E. Dunne, EFAN:Dec 74:207
Philadelphia—Civil Engineering News Roundup, CE: June 76:60
Pilots Evaluation of the D/FW Airport, Woody Lockhart, EFAN:Dec 74:201
Porous Friction Course Solves Airport Hydroplaning Problem, Edward A. Johnson and Thomas D. White, CE:Apr 76:90
Reporter's Summary for Session VI—Summary Session, Cabell Gwathmey, EFAN:Dec 74:292
Runway Rebuilding with Daily Use, Grant S. Anderson and Kenneth T. Giles, CE:Mar 75:78
Scale Model Study of Los Angeles International Airport, Richard G. Cann, TE3:Aug 75:455:11489
Slipform Pavers Prove Their Versatility, Gordon K. Ray, Edwin C. Lokken and Robert G. Packard, TE4:Nov 75:721:11725
Staging of Improvements to Air Transport Terminals, Angus J. McKenzie, Jack W.E. Huggett and Kenneth W. Ogden, TE4:Nov 74:855:10920
Structural Analysis of Flexible Airfield Pavements, Richard G. Ahlvin, Yu Tang Chou and Ronald L. Hutchinson, TE3:Aug 74:625:10727
Summary — Case Study of Dallas/Fort Worth Airport, Jack D. Downey, EFAN:Dec 74:165
Summary for Session IV —Case Study of Dallas/Fort Worth Airport, Jack L. Mahan, Jr., EFAN:Dec 74: 265
Transportation Corridor Planning for Arizona Regional Airport, Wayne W. Linthacum, TE3:Aug 75:415:11478
Use of Simulation in Airport Planning and Design, Dana E. Low, TE4:Nov 74:985:10954

Airport Terminals
Design of the D/FW Airport Terminals for the Public, Tom Bear, EFAN:Dec 74:197
La Guardia Airport Parking and Terminal Frontage Structure, Eugene J. Fasullo, CE:Mar 76:53
Method for Designing Airport Terminal Concepts, John P. Braaksma and John H. Shortreed, TE2: May 75:321:11308
Passenger Evaluation of D/FW Airport, James E. Dunne, EFAN:Dec 74:207
Pilots Evaluation of the D/FW Airport, Woody Lockhart, EFAN:Dec 74:201
Summary — Case Study of Dallas/Fort Worth Airport, Jack D. Downey, EFAN:Dec 74:165
Summary for Session IV —Case Study of Dallas/Fort Worth Airport, Jack L. Mahan, Jr., EFAN:Dec 74: 265

Air Pressure
Gust Factors for Hyperbolic Cooling Towers, Mahendra P. Singh and Ajaya K. Gupta, ST2:Feb 76:371:11894

Air Quality Standards
Impact of Air Quality on Bicyclists, Eugene E. Burr and Terry L. Miller, BP75:Dec 75:571

Air Suspension Systems
Largest and Lightest Fabric Roof to Date, David H. Geiger, CE:Nov 75:82

Air Transportation
Air Passenger Handling Facilities: Future Planning-Design Impacts, Hanan A. Kivett, Chmn., TE3:Aug 76:461:12289
Airport Choice: An Empirical Study, Robert E. Skinner, Jr., TE4:Nov 76:871:12554
Civil Engineering Applications of Remote Sensing, David J. Barr and Wesley P. James, TE2:May 75: 279:11300
A Communications Project — D/FW Airport, Jack D. Downey, EFAN:Dec 74:168
Criteria Development to Evaluate Runway Roughness, Benjamin Frank McCullough and David Charles Steitle, TE2:May 75:345:11333
Evaluating Multi-Modal Alternatives: San Diego/Los Angeles Corridor Study, Darwin G. Stuart, Preprint No.2666, Apr 76, 29pp.
Full-Depth Asphalt Airfield Pavements, Matthew W. Witczak and James F. Shook, TE2:May 75:297: 11331
Gate-Arrival Terminals—Solution for Air Cargo?, Francis Chin, Richard de Neufville and Jorge Rebelo, TE1:Feb 76:47:11890
Integrated Grant Administration Program, Roland M. Lewis and Johannes W. Kurz, TE1:Feb 75:155: 11110
Intercity Systems, Jerry D. Ward, Preprint No.2769, Sept 76, 17pp.
Method for Designing Airport Terminal Concepts, John P. Braaksma and John H. Shortreed, TE2: May 75:321:11308
Passenger Evaluation of D/FW Airport, James E. Dunne, EFAN:Dec 74:207
Planning Air Transport Network in Appalachia, Everett C. Carter and Edward K. Morlok, TE3:Aug 75:569:11499
Response of Flexible Pavements to Multiple Loads, Yu Tang Chou, Ronald L. Hutchinson and Harry H. Ulery, Jr., TE2:May 75:247:11307
Scale Model Study of Los Angeles International Airport, Richard G. Cann, TE3:Aug 75:455:11489
Staging of Improvements to Air Transport Terminals, Angus J. McKenzie, Jack W.E. Huggett and Kenneth W. Ogden, TE4:Nov 74:855:10920
Strategies for Alleviating Impact of Aircraft Noise, Adib Kanafani and Abdullah Mogharabi, TE4:Nov 75:657:11715

Structural Analysis of Flexible Airfield Pavements, Richard G. Ahlvin, Yu Tang Chou and Ronald L. Hutchinson, TE3:Aug 74:625:10727
Summary for Session IV —Case Study of Dallas/Fort Worth Airport, Jack L. Mahan, Jr., EFAN:Dec 74: 265
Transportation Corridor Planning for Arizona Regional Airport, Wayne W. Linthacum, TE3:Aug 75:415:11478
Use of Simulation in Airport Planning and Design, Dana E. Low, TE4:Nov 74:985:10954

Air Water Interactions
Water to Air Bacterial Transfer by Bursting Bubbles, D. Wozniak, M. Kiwak, C. Cahoon and Robert H. Edgerton, EE3:June 76:567:12197
Wave Energy Transfer Mechanisms in Wind-Wave Tunnels, James B. Bole, WW4:Nov 74:325:10932

Alabama
Predicting Material Transportation in Mobile Bay, Gary C. April, Samuel Ng, Hua-An Liu and Donald O. Hill, DIEE:Jan 76:833

Alaska
Anchorage Port Survives Nature, Harry Ekizian, CE: Dec 76:64
First Bridge Across the Yukon River, Lawrence Carlson, Roy C.J. Dreyer and Rodney Platzke, CE: Aug 76:47
Liquefaction Criteria for the Trans-Alaska Pipeline, Neville C. Donovan and Sukhmander Singh, Preprint No.2752, Sept 76, 30pp.
Regional Sediment Yield Analysis of Alaska Streams, Gary L. Guymon, HY1:Jan 74:41:10255
Sediment Discharge by Glacier-Fed Rivers in Alaska, Craig H. Everts, WW76:Aug 76:907
Shoaling Rate Prediction Using a Sedimentation Tank, Craig H. Everts, OE75:June 75:294
Soil-Moisture-Temperature for Alaskan Lowland, Gary L. Guymon, IR3:Sept 75:187:11562
Summer Moisture-Temperature for Arctic Tundra, Gary L. Guymon, IR4:Dec 76:403:12613
Thermal Analysis of Frozen Embankment Islands, Guy R. Bafus and Gary L. Guymon, WW2:May 76:123:12139
Yukon River to Prudhoe Bay Highway — Lessons in Arctic Design and Construction, James F. McPhail, William B. McMullen and Allan W. Murfitt, CE: Feb 76:78

Alfred M. Freudenthal Medal
1976 Alfred M. Freudenthal Medal Presented to Emilio Rosenblueth, CE:Oct 76:99

Alfred Nobel Prize
1976 Alfred Noble Prize Presented to Shri N. Singh, CE:Oct 76:104

Algae
Bioassessment of the Standard Elutriate Test, Peter J. Shuba, Joe H. Carroll and Henry E. Tatem, DIEE: Jan 76:645
Biomass Distribution and Kinetics of Baffled Lagoons, James H. Reynolds, Stephen B. Nielson and E. Joe Middlebrooks, EE6:Dec 75:1005:11787
Ecology of Blue-Green Algal Viruses, Robert E. Cannon, Miriam S. Shane and Eugene DeMichele, EE6:Dec 74:1205:11012
Nutrient Transformations in Mass Cultures of Marine Algae , Joel C. Goldman and John H. Ryther, EE3: June 75:351:11358
Segmented Population Model of Primary Productivity, Guenton C. Slawson, Jr. and Lorne G. Everett, EE1:Feb 76:127:11945
Wind Control of Algae Growth in Eutrophic Lakes, Heinz Stefan, Timothy Skoglund and Robert O. Megard, EE6:Dec 76:1201:12619

Algal Nutrients
Nutrient Transformations in Mass Cultures of Marine Algae , Joel C. Goldman and John H. Ryther, EE3: June 75:351:11358

Algorithms
An Algorithm for Route Deviation Service, Stanley T.L. Lung and Wilfred W. Recker, TE1:Feb 76:161: 11931
Node Numbering Optimization in Structural Analysis, Joaquim S.N. Rodrigues, ST2:Feb 75:361: 11117
Sparsity Oriented Analysis of Large Pipe Networks, M. Chandrashekar and K. H. Stewart, HY4:Apr 75: 341:11260

Alignment
Design of Transit Structures for Urban Areas, David G. Hammond and Drupad B. Desai, TE1:Feb 76:1: 11918
Large Flexible Turbine Foundations, Amin M. Almuti, T76:Aug 76:707
Visual Quality Controls in Highway Design, Bob L. Smith, TE3:Aug 75:479:11487

Alkaline Soils
Deterioration of Concrete Ditch Liners in Saline-Alkali Soil, Luther B. Grass and Paul Koluvek, IR4: Dec 74:477:10997

Allowable Stress
Multistory Frame Design Using Story Stiffness Concept, Francois Cheong Siat Moy, ST6:June 76: 1197:12221

Alluvial Channels
Initial Operation of the Pakistan Link Canals, Lyman R. Flook, Jr., WW76:Aug 76:1737
Integral-Equation Analysis of Flows Over Eroding Beds, S. N. Prasad and Carlos V. Alonso, WW76: Aug 76:760
Mathematical Model to Simulate Channel Deformation, Purshottam Dass and Daryl B. Simons, WW76:Aug 76:1
Meandering Thalwegs in Straight Alluvial Channels, V. Miguel Ponce and Khalid Mahmood, WW76: Aug 76:1418
Procedural Errors in Alluvial Channel Measurements, Tariq Masood, Khalid Mahmood and M. M. Siddiqui, WW76:Aug 76:591
Resistance Equation for Alluvial-Channel Flow, Durl E. Burkham and David R. Dawdy, HY10:Oct 76: 1479:12462
Resistance to Flows in Alluvial Channels, ChiEmeka G. Ilo, HY6:June 75:665:11352
Shape and Size of Alluvial Canals, Shrikrishna V. Chitale, HY7:July 76:1003:12260

Alluvial Deposits
Mild Slope Stable Channels — A Stochastic Design Approach, Bent A. Christensen, Preprint No.2680, Apr 76, 14pp.

Alluvial Streams
Factors Determining Bed Forms of Alluvial Streams, Vito A. Vanoni, HY3:Mar 74:363:10396
Field Research in Large Sand Bed Channels, Khalid Mahmood and Riaz Nazir Tarar, WW76:Aug 76: 1318
Local Erosion Caused by Rapid Forced Infiltration, Brian B. Willetts and Michael E. Drossos, HY12: Dec 75:1477:11796
Non-Structural Flood Control in Rivers Flowing in Their Alluvions, Fuat Senturk, WW76:Aug 76:1199

Aluminate Cements
Fifty-Year Developments in High Strength Concrete, Colin D. Johnston, CO4:Dec 75:801:11757

Aluminum
Aluminum Beam Webs Under Concentrated Loads, Maurice L. Sharp, ST76:Aug 76:569
Model Studies of Multicell Curved Box-Girder Bridges, Mohammad Aslam and William G. Godden, EM3:June 75:207:11366

Aluminum Alloys
Fifty Years of Aluminum in Construction, Cedric Marsh, CO3:Sept 75:583:11591

Alums
Dewatering Chemical-Primary Sludges, David Di Gregorio and Gerald L. Shell, EE5:Oct 76:1087: 12474

Ambient Temperatures
Determining Ambient Water Temperatures, Mark Markofsky and Roger C. Binkerd, HY3:Mar 75: 361:11171

American Bicentennial
The Bicentennial of Structural Engineering, Carl Hirsch, ST6:Aug 76:359
Birth of the Skyscraper, CE:July 76:61
Canal Development in Early America, Richard G. Waugh, Jr., Preprint No.2774, Sept 76, 30pp.
The Colonial Port of Charleston, Thurman T. Morgan, Preprint No.2774, Sept 76, 26pp.
Concrete Applications in Transportation Construction (1891-1976), Gordon K. Ray, Preprint No.2745, Sept 76, 29pp.
Decisions About Wastewater Technology, 1800-1932, Joel A. Tarr and Francis Clay McMichael, Preprint No.2792, Sept 76, 30pp.
Early American Riverports, Robert H. Allan, Preprint No.2783, Sept 76, 26pp.
Early Developments in American Concrete, Russell S. Fling, Preprint No.2791, Sept 76, 24pp.
Economics and Water Resources Planning in America: 1776-1976, L. Douglas James and Jerry R. Rogers, Preprint No.2754, Sept 76, 30pp.
Empire State: Greatest of All Skyscrapers, CE:July 76:65
Hydrology and Water Resources Planning in America: 1776 to 1976, Ray K. Linsley, Preprint No.2754, Sept 76, 12pp.
Integrating Environmental Factors Into Water Planning: An Historical Perspective, Leonard Ortolano, Preprint No.2754, Sept 76, 20pp.
Introduction to Colonial Ports, Richard L. Schultz, Preprint No.2774, Sept 76, 6pp.
Planning for Water Quality: 1776 to 1976, Donald L. Hey and W. Henry Waggy, Preprint No.2754, Sept 76, 16pp.
The Port of New Orleans in the 18th Century — The Formative Years, Herbert R. Haar, Jr., Preprint No.2783, Sept 76, 15pp.
Port of San Francisco, Robert L. Sloan, Preprint No.2783, Sept 76, 26pp.
Prestressed Concrete Bridges, Brice F. Bender, Preprint No.2742, Sept 76, 20pp.
San Diego Harbor — Past and Present, Charles H. Fisher, Preprint No.2783, Sept 76, 4pp.
The Space Program's Contribution to Our Bicentennial, George Edwin Shofner, Jr., Preprint No.2772, Sept 76, 24pp.
The Story of America's Transportation Revolution, Eugene E. Dallaire, CE:July 76:70
Systems Aspects of Water Resources Planning in America: 1776 to 1976, Stephen J. Burges, Preprint No.2754, Sept 76, 34pp.
The Three Ages of Philadelphia, Kneeland A. Godfrey, Jr., CE:July 76:44
Two Centuries of Water Planning: A Review of the Development of Methodology, Ray K. Linsley, Preprint No.2754, Sept 76, 10pp.
Two Hundred Years—and More—of Engineering in the United States, Charles A. Parthum, EI4:Oct 76: 423:12506
Water Planning — An Overview, Eugene W. Weber, Preprint No.2754, Sept 76, 8pp.
Water Resources Planning — Historical Development, Theodore M. Schad, Preprint No.2754, Sept 76, 22pp.
Water Resources Planning in America: 1776 to 1976 — Impact of Other Policies on Water Planning: Public Health, Leonard B. Dworsky and Bernard B. Berger, Preprint No.2754, Sept 76, 16pp.

Amplification
Seismic Design of Offshore Concrete Structures, Ben C. Gerwick, Jr. and Shighero Watanabe, Preprint No.2729, Apr 76, 8pp.

Amplitude
Water Wave Propagation—Linear Versus Nonlinear Theories, Joseph L. Hammack and Harvey Segur, OE75:June 75:1247

Anaerobic Bacteria
Biomass Distribution and Kinetics of Baffled Lagoons, James H. Reynolds, Stephen B. Nielson and E. Joe Middlebrooks, EE6:Dec 75:1005:11787

Anaerobic Conditions
Effect of Drainage on the Subsidence of Organic Soil, Ross W. Irwin, IR76:July 76:211

Anaerobic Digestion
Feedlot Wastes to Useful Energy — Fact or Fiction?, Lawrence A. Schmid, EE5:Oct 75:787:11647
Sanitary Landfill Leachates and Their Leachate Treatment, Edward S.K. Chian and Poppe B. DeWalle, EE2:Apr 76:411:12033

Analogs
Beam Analog for Plate Elements, M. Ezzat Mohsin and Edward E. Sadek, ST1:Jan 76:125:11844
Convective Transport Finite Element Analog, Keith W. Bedford and James A. Liggett, EM6:Dec 75: 803:11807
Modeling the Chipuxet Ground Water Aquifer, William E. Kelly, NMG:June 76:II-1188

Analysis
Analysis of Dredging Projects, William B. Pearce, DIEE:Jan 76:139
Analysis of Lateral Buckling in Plane Frames, Porpan Vacharajittiphan and Nicholas S. Trahair, ST7:July 75:1497:11430
Longitudinal Dispersion Coefficients for Streams, Subhash C. Jain, EE2:Apr 76:465:12037
Use of Simulation in Airport Planning and Design, Dana E. Low, TE4:Nov 74:985:10954

Analytical Techniques
Bearing Capacity Analysis of Reinforced Earth Slabs, Jean Binquet and Kenneth L. Lee, GT12:Dec 75: 1257:11793
Slime Holdup, Influent BOD, and Mass Transfer in Trickling Filters, Bernard Atkinson and John A. Howell, EE4:Aug 75:585:11505

Anchorages
Experimental Methods and Instrumentation for Power Generation Structures — Some Case Studies, Joseph W. Fortey and Raymond R. Funk, Preprint No.2717, Apr 76, 25pp.
Holding Capacity of Direct Embedment Anchors, Richard M. Beard and Homa J. Lee, OE75:June 75:470
Liner Anchorage Tests, Edwin G. Burdette and Larry W. Rogers, ST7:July 75:1455:11432
Pullout Resistance of Horizontal Anchors, Braja M. Das and Gerald R. Seeley, OE75:June 75:434
Shallow Anchor Resistance to Eccentric Uplift Load, Braja M. Das and Gerald R. Seeley, TN: GT4:Apr 76:387:12019
Steel Stress-Ribbon Concept — Will It Save Money?, Robert J. Wheen, CE:May 76:74
Studies on Anchored Flexible Walls in Sand, Thomas H. Hanna and Ibrahim I. Kurdi, GT10:Oct 74:1107: 10854
Tunnel under Alps Uses New, Cost-Saving Lining Method, Ladislaus v. Rabcewicz, CE:Oct 75:66

Anchors
Anchor-Last Deployment Simulation by Lumped Masses, Robert W. Thresher and John H. Nath, WW4:Nov 75:419:11709
Holding Capacity of Direct Embedment Anchors, Richard M. Beard and Homa J. Lee, OE75:June 75:470
Metal Ties and Anchors for Brick Walls, Clayford T. Grimm, ST4:Apr 76:839:12067
Pullout Resistance of Horizontal Anchors, Braja M. Das and Gerald R. Seeley, OE75:June 75:434

Some Applications of Prestressing in Foundation Construction, Ingvar Schousboe, CO2:June 75:403: 11395

Angle of Attack Indicators
Shih-Kang Dam Multi-Purpose Development Project, Walter Chin Mih, WW76:Aug 76:1630

Anisotropy
Analysis of a Test Embankment Considering the Anisotropy of the Soil, Hakan Stille, A. Fredriksson and Bengt B. Broms, NMG:June 76:II-611
Analysis of Shear-Induced Anisotropy in Leda Clay, K. T. Law and Kwan Y. Lo, NMG:June 76:I-329
Anisotropy for Finite Element Analysis, Ravikumar Bhaskaran, NMG:June 76:I-345
Anisotropy in Heavily Overconsolidated Kaolin, Srinath F. Amerasinghe and Richard H.G. Parry, GT12:Dec 75:1277:11808
Elastoplastic Torsion of Anisotropic Bars, Pravit Boonlualohr and Somasundaram Valliappan, EM6: Dec 76:995:12634
Embankment on Soft and Sensitive Clay Foundation, Oscar Dascal and Jean-Pierre Tournier, GT3:Mar 75:297:11193
Energy Absorbing Boundary for Anisotropic Material, Somasundaram Valliappan, Weeks White and Ian K. Lee, NMG:June 76:II-1013
Finite Element Study of a Shallow Tunnel in Rock Exhibiting Clay-Induced Anisotropy, C. F. Lee and Kwan Y. Lo, NMG:June 76:II-834
Flow at Interface of Two Anisotropic Soil Zones, Robin N. Chowdhury, TN: GT11:Nov 76:1195: 12513
Incremental Stress-Strain Relationship for Cohesionless Soil, F. Darve, S. Labanieh and R. Chambon, NMG:June 76:I-264
Micromechanics Model for Creep of Anisotropic Clay, Zdenek P. Bazant, I. Kutay Ozaydin and Raymond J. Krizek, EM1:Feb 75:57:11138
Seepage from Trapezoidal Canal in Anisotropic Soil, Annapareddy S. Reddy and Udayaditya Basu, IR3: Sept 76:349:12386
Strength of One Dimensionally Consolidated Clays, Adel S. Saada and Gary F. Bianchini, GT11:Nov 75:1151:11707
Transverse Bending of Laminated Anisotropic Plates, Eric Reissner, TN: EM3:June 76:559:12168

Annual Floods
Economics of Permanent Flood-Plain Evacuation, Nolan L. Johnson, Jr., IR3:Sept 76:273:12378

Antarctic
Basic Construction Principles in Higher Latitudes, Shu-T'ien Li, CO1:Mar 74:33:10399

Antecedent Precipitation
Rainfall Temporal Patterns for Design Floods, David H. Pilgrim and Ian Cordery, HY1:Jan 75:81:11057

Antennas
Instability Mechanisms for Rotating Appendages, John O. Dow and Chuan C. Feng, Preprint No.2801, Sept 76, 27pp.
Membrane Solutions for Shells with Edge Constraint, Charles R. Steele, EM3:June 74:497:10605

Aorta
Refined Stress Analysis of Human Aortic Heart Valves, Altay Cataloglu, Phillip L. Gould and Richard E. Clark, EM1:Feb 76:135:11924

Aortic Injuries
Refined Stress Analysis of Human Aortic Heart Valves, Altay Cataloglu, Phillip L. Gould and Richard E. Clark, EM1:Feb 76:135:11924

A.P. Greensfelder Construction Prize
1976 A.P. Greensfelder Prize Presented to A.P. Bezzone, CE:Oct 76:100

Apparel Fabrics
Apparel-Goods Movement Process, Sam Kahan, Carl M. Berkowitz and Walter H. Kraft, TE3:Aug 76: 507:12298

Applied Research
Goals for Education and Research in Construction, Boyd C. Paulson, Jr., CO3:Sept 76:479:12393
Irrigation Research to Practice in Grand Valley, Gaylord V. Skogerboe, Wynn R. Walker and Robert G. Evans, IR76:July 76:19
The University's Role in Research Implementation, Ernest T. Smerdon, IR76:July 76:11

Apprenticeship
Learning and Experience Curves, Marvin Gates and Amerigo Scarpa, CO1:Mar 72:79:8778

Appropriation (Water Rights)
Your Water — How Secure?, John W. Bird, IR3:Sept 76:363:12424

Approximation
Non-Linear Elastic Approximations of the Behaviour of Soils, Arnold Verruijt, NMG:June 76:III-1321

Approximation Method
Analysis of Some Double Layer Grids, Andrew G. Collings, ST8:Aug 76:1591:12342
Approximate Analysis and Economics of Structures, Niels C. Lind, ST6:June 76:1177:12201
Buckling of Cable-Stayed Girder Bridges, Man-Chung Tang, ST9:Sept 76:1675:12391
Continuous Plate Analysis by Finite Panel Method, Richard M. Gutkowski and Chu-Kia Wang, ST3: Mar 76:629:12002
Frame Optimization Including Frequency Constraints, J. Shamie and Lucien A. Schmit, Jr., ST1:Jan 75:283:11075
On Kinematic Wave Approximation for Flood Routing, Ruh-Ming Li, Daryl B. Simons, Larry S. Shiao and Yung H. Chen, WW76:Aug 76:377
Optimum Structural Design with Dynamic Constraints, Juan H. Cassis and Lucien A. Schmit, Jr., ST10:Oct 76:2053:12491
Solutions to Green-Ampt Infiltration Equation, Ruh-Ming Li, Michael A. Stevens and Daryl B. Simons, IR2:June 76:239:12196

Aquatic Environment
Assessment of Environmental Impact on the Aquatic Environment with Limited Field Data, Paul E. Flatt and Charles D.D. Howard, IR76:July 76:435

Aquatic Life
Effects of Suspended Dredged Material on the Commercial Crab, *Cancer Magister*, Richard Peddicord and Victor McFarland, DIEE:Jan 76:633

Aquatic Plants
Environmental Aspects of Aquatic Plant Control, Thomas R. Bartley and Edward O. Gangstad, IR3: Sept 74:231:10810
Spartina Revegetation on Dredge Spoil in SE Marshes, William M. Dunstan, Gregory L. McIntire and Herbert L. Windom, WW3:Aug 75: 269:11530
Use of Remote Sensing for Mapping Wetlands, Robert J. Reimold and Rick A. Linthurst, TE2:May 75:189:11293

Aqueducts
Aqueduct Optimization with Intermediate Storage, Jayant Sathaye and Warren A. Hall, IR2:June 76: 249:12180
Optimization of Design Capacity of an Aqueduct, Jayant Sathaye and Warren A. Hall, IR3:Sept 76: 295:12396
Planning the Tehachapi Crossing, Alfred R. Golze, HY1:Jan 75:1:11052

Aquifers
Aquifer Parameter Identification, William Wen-Gong Yeh, HY9:Sept 75:1197:11582

Control of Salt-Water Intrusion by Recharge Wells, Abdel-Aziz I. Kashef, IR4:Dec 76:445:12617
Drawdown in Compressible Unconfined Aquifer, Tatiana D. Streltsova, HY11:Nov 74:1601:10950
Ground-Water Pollution Near a Landfill, William E. Kelly, EE6:Dec 76:1189:12609
Ground-Water's Role in Water Quality Management, John O. Osgood, HY3:Mar 75:517:11159
Hydrodynamics of Perched Mounds, Richard R. Brock, HY8:Aug 76:1083:12305
Investigation of Two-Regime Well Flow, Pongsarl Huyakorn and Colin R. Dudgeon, HY9:Sept 76: 1149:12383
Irrigation Development in Bangladesh, Stephen V. Allison and Kazi F. Jalal, IR1:Mar 74:69:10394
Modeling the Chipuxet Ground Water Aquifer, William E. Kelly, NMG:June 76:II-1188
Numerical Solution of Boussinesq Equation, Sita Ram Singh and C. M. Jacob, EM5:Oct 76:807: 12463
Optimal Pumping for Aquifer Dewatering, Eduardo Aguado, Irwin Remson, Mary F. Pikul and Will A. Thomas, HY7:July 74:869:10639
Oxnard-Hueneme Pipeline, Operation and Water Quality Problems, Richard A. Smith, Preprint No.2683, Apr 76, 8pp.
Pumping of Aquifer with Viscoelastic Properties, Wilfried Brutsaert and M. Yavuz Corapcioglu, HY11:Nov 76:1663:12541
State-of-the-Art of Geothermal Reservoir Engineering, Patrick K. Takahashi, Bill H. Chen, Ken I. Mashima and Arthur S. Seki, PO1:July 75: 111:11455
Subsurface Drainage Solutions by Galerkin's Method, Purushottam Dass and Hubert J. Morel-Seytoux, IR1:Mar 74:1:10397
Transient Aquifer Flows by Characteristics Methods, E. Benjamin Wylie, HY3:Mar 76:293:12001
Transient Dispersion in Uniform Media Flow, Hung Tao Shen, HY6:June 76:707:12202

Aquitards
Water Quality and Aquitard Permeability, James H. Hardcastle and James K. Mitchell, IR2:June 76: 205:12203

Arbitration
Fifty Years of Construction Law, Robert A. Rubin, CO4:Dec 75:703:11758

Archaeology
Historical Sites and the Construction Engineer, Mario G. Salvadori, CO2:June 76:295:12183
Session VI — Socio-Economic Problems, Conception Tan, EFEEC:Aug 75:421

Arches
Brick Masonry Shells, Clayford T. Grimm, ST1:Jan 75:79:11050
Dynamic Buckling of Shallow Arches, David L.C. Lo and Ernest F. Masur, EM5:Oct 76:901:12493
Elastic Buckling of Arches under Symmetrical Loading, Walter J. Austin and Timothy J. Ross, ST5:May 76:1085:12149
Finite Element Analyses of Arch Abutments, E. D'Appolonia, Donald E. Shaw, Jacques Richard and Daniel A. Raynaud, GT76:Aug 76:55
Finite Element Analysis of Doubly Corrugated Shells, Herbert A. Mang, C. V. Girya Vallabhan and Jimmy H. Smith, ST10:Oct 76:2033:12482
Flexural-Torsional Buckling of Curved Members, Porpan Vacharajittiphan and Nicholas S. Trahair, ST6:June 75:1223:11350
The University of Idaho Stadium: A Micro-Lam Application, Sherman A. Nelson, Preprint No.2800, Sept 76, 19pp.

Arching
Resistance of Masonry Infill Walls to Out-of-Plane Dynamic Motion, Bernard L. Gabrielsen and Kenneth Kaplan, Preprint No.2771, Sept 76, 26pp.

Architects
Architects and Nature: On the Primacy of Man, Eric Hoffer, EFAN:Dec 74:8
Staff Versus Administration Versus Board or the Planning Process Organized for Consensus Instead of Conflict, James Falick, David Burdick and Henry Winkelman, Preprint No.2701, Apr 76, 23pp.

Architecture
Aesthetics is a Do-It-Yourself Project, Raymond C. Reese, ST76:Aug 76:33
Art in Engineering - The Need for a New Criticism, David P. Billington, PP4:Oct 73:499:10102
Early Developments in American Concrete, Russell S. Fling, Preprint No.2791, Sept 76, 24pp.
Masjid (Mosque) Designing, Altaf Hussain, UP1:Aug 76:177:12349
New Building Measures Needed in Order to Design for People, Calvin W. Taylor, EFAN:Dec 74:47
Noise in the Urban Environment, Felipe U. Derteano, UP2:Nov 75:183:11688
Performance Requirements for Fireproofing Materials, Lawrence G. Seigel, EM3:June 74:489: 10598
Seismic Design of Non-Structural Building Systems, Alfred Goldberg, Preprint No.2756, Sept 76, 14pp.

Arctic
Basic Construction Principles in Higher Latitudes, Shu-T'ien Li, CO1:Mar 74:33:10399
Soil-Moisture-Temperature for Alaskan Lowland, Gary L. Guymon, IR3:Sept 75:187:11562
Summer Moisture-Temperature for Arctic Tundra, Gary L. Guymon, IR4:Dec 76:403:12613

Arctic Engineering
Basic Construction Principles in Higher Latitudes, Shu-T'ien Li, CO1:Mar 74:33:10399
Geotechnical Aspects of Trans-Alaska Pipeline, Ulrich Luscher, William T. Black and Keshavan Nair, TE4:Nov 75:669:11722
Off-Highway Transportation in the Arctic, Arthur D. Anderson, CE:Mar 76:72
Yukon River to Prudhoe Bay Highway — Lessons in Arctic Design and Construction, James F. McPhail, William B. McMullen and Allan W. Murfitt, CE: Feb 76:78

Arctic Regions
Northern Off-Road Transportation in the 70's, I. A. Thomas, CO3:Sept 75:635:11573
Surface Currents in the Arctic and Sub-Arctic Seas as Deduced from Satellite Photographs of Ice Floes, Paul E. La Violette, OE75:June 75:1166

Area
Masjid (Mosque) Planning, Altaf Hussain, UP1:Aug 76:171:12348

Arid Lands
Flood Peaks in Southern California Desert Areas, George E. Ribble, WW76:Aug 76:1094

Arizona
Tempe Bikeways — The Morning After, Elizabeth A. Drake, BP75:Dec 75:449
Transportation Corridor Planning for Arizona Regional Airport, Wayne W. Linthacum, TE3:Aug 75:415:11478
Water for the Valley of the Sun, William W. Reedy, Preprint No.2782, Sept 76, 27pp.

Arkansas River
Maintenance Dredging on the Arkansas River, Tasso Schmidgall, WW76:Aug 76:459

Armor
Breakwater Back Slope Stability, James R. Walker, Robert Q. Palmer and James W. Dunham, OE75: June 75:879

Armoring (Streambed)
Breakwater Back Slope Stability, James R. Walker, Robert Q. Palmer and James W. Dunham, OE75: June 75:879
Stability of Channel Beds by Armoring, William C. Little and Paul G. Meyer, HY11:Nov 76:1647: 12519

Arrays
Sytems Approach to the Mechanics of Array Cables, Rolf G. Kasper, OE75:June 75:610

Art
Aesthetics is a Do-It-Yourself Project, Raymond C. Reese, ST76:Aug 76:33
Civil Engineering Esthetics—State-of-the-Art, Clayford T. Grimm and Wolfgang F.E. Preiser, ST8:Aug 76:1531:12322
Principles of Composition in Building Art, Clayford T. Grimm, ST9:Sept 75:1739:11544
Rationalized Esthetics in Civil Engineering, Clayford T. Grimm, ST9:Sept 75:1813:11546
Thinking Aesthetically is a Part of Structural Engineering, Frederick M. Law, ST76:Aug 76:1

Arthur M. Wellington Prize
New Institutions for Joint Development, Rodney E. Engelen, UP1:May 75:11:11288
1976 Arthur M. Wellington Prize Presented to Rodney E. Engelen, CE:Oct 76:102

Artificial Islands
Artificial Island Engineering, Jan Malan Jordaan, Jr., OE75:June 75:777
Candidate Industries and General Island Locations, Daniel M. Bragg, OE75:June 75:751
Ocean Engineering in the Design of Sea Islands, Michael J. McCarthy, Edward J. Schmeltz and Joseph Bonasia, OE75:June 75:762

Artificial Recharge
Wasterwater Reclamation and Recharge, Bay Park, N.Y., John Vecchioli, James A. Oliva, Stephen E. Ragone and Henry F.H. Ku, EE2:Apr 75:201:11232

ASCE (Activities)
ASCE Float is a Winner, CE:Feb 76:8
ASCE Tackles Standards, CE:Aug 76:64
A Crtical Review of ASCE's Planning and Policy Process, Thomas C. Kavanagh, EI4:Oct 74:343: 10890
Landmarks Attest CE Contribution to Progress, CE: Aug 76:76
Management Careers for Engineers, Harold G. Evans, EI4:Oct 76:409:12497
Water Pollution Control Goals Need to be Reassessed, CE:Feb 76:93

ASCE (Aims and Activities)
ASCE Local Level Public Service Actions Have Big Impact, Virginia Fairweather, CE:June 75:51

ASCE (Awards & Prizes)
Blight Receives Croes Medal, CE:Mar 76:89
Freese Lecture is Established, CE:May 76:100
Gen. Clay is First Recipient of President's Award, CE:Oct 76:96
1976 Alfred M. Freudenthal Medal Presented to Emilio Rosenblueth, CE:Oct 76:99
1976 Alfred Noble Prize Presented to Shri N. Singh, CE:Oct 76:104
1976 A.P. Greensfelder Prize Presented to A.P. Bezzone, CE:Oct 76:100
1976 Arthur M. Wellington Prize Presented to Rodney E. Engelen, CE:Oct 76:102
1976 ASCE State-of-the-Art of Civil Engineering Award Presented to Richard Field and John A. Lager, CE:Oct 76:101
1976 Can-Am Civil Engineering Amity Award Presented to John Roche Kiely, CE:Oct 76:104
1976 Civil Engineering History and Heritage Award Presented to Neal FitzSimons, CE:Oct 76:104
1976 Civil Government Award Presented to Floyd D. Peterson, CE:Oct 76:104
1976 Collingwood Prize Presented to John T. Novak and Gail E. Montgomery, CE:Oct 76:101
1976 Construction Management Award Presented to James J. O'Brien, CE:Oct 76:100
1976 Daniel W. Mead Prize for Associate Members Presented to Glenn R. Koepp, CE:Oct 76:104
1976 Daniel W. Mead Prize for Students Presented to James P. Kiser, CE:Oct 76:105
1976 Edmund Friedman Professional Recognition Award Presented to Jack E. McKee, CE:Oct 76: 102
1976 Edmund Friedman Young Engineer Award for Professional Achievement Presented to Robert E. Heightchew, Jr., Dean M. Golden, and Richard J. Scranton, CE:Oct 76:102
1976 Ernest E. Howard Award Presented to Egor Paul Popov, CE:Oct 76:97
1976 Frank M. Masters Transportation Engineering Award Presented to S. Starr Walbridge, CE:Oct 76: 103
1976 Harland Bartholomew Award Presented to Albert A. Dorman, CE:Oct 76:102
1976 James Laurie Prize Presented to John P. Veerling, CE:Oct 76:103
1976 J.C. Stevens Award Presented to Danny L. Fread, CE:Oct 76:104
1976 J. James R. Croes Medal Presented to Frank H. Pearson and Archie J. McDonnell, CE:Oct 76:102
1976 Julian Hinds Award Presented to Harvey O. Banks, CE:Oct 76:103
1976 Karl Emil Hilgard Hydraulic Prize Presented to the Task Committee for Preparation of the Manual on Sedimentation, CE:Oct 76:103
1976 Moisseif Award Presented, CE:Oct 76:97
1976 Nathan M. Newmark Medal Presented to John E. Goldberg, CE:Oct 76:99
1976 Norman Medal Presented to Roger Foott and Charles C. Ladd, CE:Oct 76:96
1976 Raymond C. Reese Award Presented to Committee on Shear and Diagonal Tension (Joint with ACI), CE:Oct 76:98
1976 Rickey Medal Presented to Franklyn Rogers and Edward Loane, CE:Oct 76:100
1976 Royce J. Tipton Award Presented to Jerald E. Christiansen, CE:Oct 76:103
1976 Samuel A. Greeley Award Presented to Ralph Stone, CE:Oct 76:101
1976 Stephen D. Bechtel Pipeline Engineering Award Presented to Kenneth E. Britain, CE:Oct 76:100
1976 Surveying and Mapping Award Presented to Kenneth S. Curtis, CE:Oct 76:104
1976 Theodore von Karman Medal Presented to Yuan-Cheng B. Fung, CE:Oct 76:99
1976 Thomas A. Middlebrooks Award Presented to John A. Focht, Jr. and Kenneth L. Lee, CE:Oct 76: 97
1976 Thomas Fitch Rowland Prize Presented to Daniel J. Smith, Jr., CE:Oct 76:100
1976 T.Y. Lin Award Presented to Walter H. Dilger, Amin Ghali and Maher K. Tadros, CE:Oct 76:97
1976 Walter L. Huber Civil Engineering Research Prizes Presented to Zdenek P. Bazant, Danny L. Fread, Lester A. Hoel, Paul H. King, and John Lysmer, CE:Oct 76:99
1976 Wesley W. Horner Award Presented, CE:Oct 76:101

ASCE (Board of Direction)
New Ethical Canons Adopted by Board, CE:Nov 76: 82

ASCE (Code of Ethics)
ASCE Code of Ethics Amended, CE:Nov 76:67
Proposed New ASCE Code of Ethics, CE:Feb 76:95

ASCE (Committees)
Civil Engineering: Education and Practice, Emory L. Kemp, EI1:Jan 76:17:11868

ASCE (Conferences)
ASCE Convention Comes to Bicentennial City, CE: Aug 76:72
CExpo '76 Product Preview, CE:Aug 76:82

Civil Engineering Curricula: Well-Rounded or Overweight?, George K. Wadlin, EI2:Apr 76:159: 12083
Construction Productivity — How to Improve It, CE: Oct 76:57
Grass Roots Conferences Held in ASCE Zones, CE: Mar 76:88
Highlights of ASCE Philadelphia Meeting, CE:Nov 76:71
Highlights of Denver's Record Breaker, CE:Jan 76:43
Highlights of San Diego Convention, CE:June 76:67
Philadelphia—Civil Engineering News Roundup, CE: June 76:60
Philadelphia Meeting Report — Part 2, CE:Dec 76: 58
Spring Convention to Focus on Water, CE:Feb 76:89

ASCE (Education)
ASCE Minority Group Counseling Under Way, Virginia Fairweather, CE:Aug 75:54

ASCE (Employment Conditions)
"ASCE Guide to Employment Conditions for Civil Engineers," by Committee on Employment Conditions (Book Review), Milton Alpern, CE:Feb 76:38

ASCE (Ethics)
Action Program for Elimination of Unethical Practices in the Engagement of Professional Services, John W. Frazier, Chmn., EI2:Apr 75:267: 11210
The Code of Ethics of the American Society of Civil Engineers, Mario G. Salvadori, EI2:Apr 75:215: 11252
Ethics: Wisconsin Section Sparks Timely Discussion, Robert W. Brannan, CE:May 76:90
Highlights of San Diego Convention, CE:June 76:67
Is There Price Collusion in the Civil Engineering Profession?, Michael N. Goodkind, EI3:July 76: 301:12258
Kickbacks Versus Professional Ethics, Russel C. Jones, EI3:July 75:357:11420
The Making of a "Pro"—A Faculty Viewpoint, Dan H. Pletta, EI3:July 74:217:10645
Progress Report on Development of A Code of Ethics, Marvin W. Runyan, EI2:Apr 75:199:11225
Proposed New ASCE Code of Ethics, CE:Feb 76:95
Social Responsibility Within the Present Code of Ethics, George C. Govatos, EI3:July 75:351:11412
What Has ASCE Done for Me Lately, William M. Sangster, CE:Oct :80
When Is A Political Contribution Influence Buying?, Thomas J. McCollough, EI1:Jan 76:1:11860
When the Going Gets Tough, the Tough Get Going, Leland J. Walker, CE:Nov 76:65

ASCE (Executive Director)
History of ASCE and Civil Engineering, CE:Apr 75: 67

ASCE (History)
Historic Preservation and the Role of the Civil Engineer, Ernest Allen Connally, Preprint No.2744, Sept 76, 11pp.
History of ASCE and Civil Engineering, CE:Apr 75: 67
History of Indexing and Abstracting by the American Society of Civil Engineers, Irving Amron, Preprint No.2736, Sept 76, 25pp.
John R. Freeman and His Influence on Hydraulics, John B. Drisko, Preprint No.2767, Sept 76, 10pp.
Six Landmarks Named by ASCE, CE:Mar 76:92
Two Hundred Years—and More—of Engineering in the United States, Charles A. Parthum, EI4:Oct 76: 423:12506

ASCE (Honorary Members)
Alfred R. Golze Elected to Honorary Membership, CE:Oct 76:95
Dean F. Peterson Elected to Honorary Membership, CE:Oct 76:95
Eminent Educators Deceased: Arthur E. Morgan, CE:Jan 76:94
Eminent Educators Deceased: Henry Townley Heald, CE:Jan 76:94
Herbert D. Vogel Elected to Honorary Membership, CE:Oct 76:96
Morrough P. O'Brien Elected to Honorary Membership, CE:Oct 76:95
Robert F. Legget Elected to Honorary Membership, CE:Oct 76:95
Rolf Eliassen Elected to Honorary Membership, CE: Oct 76:94
Stephen D. Bechtel Elected to Honorary Membership, CE:Oct 76:94
Trent R. Dames Elected to Honorary Membership, CE:Oct 76:94
William A. Conwell Elected to Honorary Membership, CE:Oct 76:94

ASCE (Members)
ASCE Membership Profiles, CE:Dec 76:78
Award Honors Harold Larsen, CE:Nov 76:83
Bill Kirkland—A Construction Industry "Mr. Standards", CE:Nov 76:84
Boase Award to Cameron, CE:Apr 76:95
Bugge Relates Indonesian Experiences in Executive "Peace Corps", William A. Bugge, CE:Feb 76:94
Freese Lecture is Established, CE:May 76:100
Leif Sverdrup Dies at 77, CE:Feb 76:94
Lin Honored by Colleagues, CE:June 76:82
Philip Abrams Dead at 51, CE:Nov 76:84
Presidential Address, Arthur J. Fox, Jr., EI3:July 76: 315:12263
Symposium Honors T.Y. Lin, CE:Aug 76:71
Tschebotarioff, Foundations Pioneer, Looks Back— and Ahead, CE:May 76:99
Turner Medal to Ferguson, CE:Sept 76:112
William R. Gibbs Nominated for ASCE President-Elect, CE:July 76:86

ASCE (Membership)
ASCE Minority Group Counseling Under Way, Virginia Fairweather, CE:Aug 75:54

ASCE (National Affairs)
Community Environmental Action Program for Civil Engineers, Gerald R. Dyson, Chmn., EI2:Apr 75: 259:11211
Effectiveness of Present Operating Procedures and of the PAC Structure, Leland J. Walker, EI2:Apr 75: 247:11268
Public Affairs in the Civil Engineer: A Guideline for Accomplishment, Jewell T. Wood, EI3:July 76:339: 12262

ASCE (Officers)
Donald S. Austin Takes Office in Philadelphia, CE: Oct 76:93
D.Russell Tatman Takes Office in Philadelphia, CE: Oct 76:93
Eugene R. McMaster Takes Office in Philadelphia, CE:Oct 76:93
Francis J. Connell Takes Office in Philadelphia, CE: Oct 76:93
Franklin D. Meyers Takes Office in Philadelphia, CE:Oct 76:93
James W. Gillespie Takes Office in Philadelphia, CE: Oct 76:93
Russel C. Jones Takes Office in Philadelphia, CE:Oct 76:93
William J. Carroll Takes Office in Philadelphia, CE: Oct 76:93
William R. Gibbs Nominated for ASCE President-Elect, CE:July 76:86
William R. Gibbs Takes Office in Philadelphia, CE: Oct 76:91
William W. Moore Takes Office in Philadelphia, CE: Oct 76:93

ASCE (Outstanding Civil Engineering)
Albany South Mall: Largest State Government Complex, John C. Byron, CE:May 76:66
Keowee-Toxaway Power Project — OUTSTANDING, Roney A. Heinz, CE:June 75:46

University of Idaho Barrel-Arch Roof Wins Outstanding Structural Engineering Award, CE: June 76:48

ASCE (Policy)
ASCE Positions on 97 Subjects Available for Reference, CE:Mar 76:90
A Crtical Review of ASCE's Planning and Policy Process, Thomas C. Kavanagh, EI4:Oct 74:343: 10890

ASCE (Presidents)
ASCE and Nuclear Power Plants, Arthur J. Fox, Jr., EI3:July 76:279:12259
The Forgotten Engineer: John Stevens and the Panama Canal, Virginia Fairweather, CE:Feb 75:54
Fox Responds to New York Times Article on New EPA Regs, Arthur J. Fox, Jr., CE:Feb 76:87
John R. Freeman and His Influence on Hydraulics, John B. Drisko, Preprint No.2767, Sept 76, 10pp.
Presidential Address, Arthur J. Fox, Jr., EI3:July 76: 315:12263
Walker's His Name, Management's His Game, CE: Oct 76:91
What Has ASCE Done for Me Lately, William M. Sangster, CE:Oct :80
When the Going Gets Tough, the Tough Get Going, Leland J. Walker, CE:Nov 76:65
William R. Gibbs Nominated for ASCE President-Elect, CE:July 76:86
William R. Gibbs President-Elect of ASCE for 1977, CE:Sept 76:106

ASCE (Professional Activities)
The Adopted ASCE Guide to Turnkey Construction Contracts, David L. Narver, Jr., EI2:Apr 75:235: 11249
ASCE's Current Position on Competitive Bidding, CE:Jan 76:88
ASCE's Guidelines for Participation in Public Affairs Activities Four Years Later, David Novick, EI4: Oct 76:429:12500
Community Environmental Action Program for Civil Engineers, Gerald R. Dyson, Chmn., EI2:Apr 75: 259:11211
A Crtical Review of ASCE's Planning and Policy Process, Thomas C. Kavanagh, EI4:Oct 74:343: 10890
Effectiveness of Present Operating Procedures and of the PAC Structure, Leland J. Walker, EI2:Apr 75: 247:11268
The Engineering and Minority Community in Symbiosis, Sol E. Cooper, EI2:Apr 76:217:12078
Presidential Address, Arthur J. Fox, Jr., EI3:July 76: 315:12263
Professional Conduct Proceedings, CE:Jan 76:89
Spring Convention to Focus on Water, CE:Feb 76:89
Toward A More United ASCE, Elmer B. Isaak, EI1: Jan 76:7:11859

ASCE (Professional Objectives)
ASCE's Guidelines for Participation in Public Affairs Activities Four Years Later, David Novick, EI4: Oct 76:429:12500
Social Responsibility Within the Present Code of Ethics, George C. Govatos, EI3:July 75:351:11412

ASCE (Professional Practice)
ASCE's Guidelines for Participation in Public Affairs Activities Four Years Later, David Novick, EI4: Oct 76:429:12500
Effectiveness of Present Operating Procedures and of the PAC Structure, Leland J. Walker, EI2:Apr 75: 247:11268
Is There Price Collusion in the Civil Engineering Profession?, Michael N. Goodkind, EI3:July 76: 301:12258
A Statement on Professional Services—Competitive Bidding, Gerald L. Devlin, EI1:Jan 75:53:11082

ASCE (Publications)
CE Compensation Up Nearly 20% Overall in Two Years, ASCE Salary Survey Shows, CE:Mar 76:83
History of Indexing and Abstracting by the American Society of Civil Engineers, Irving Amron, Preprint No.2736, Sept 76, 25pp.
Indexing Shortcut, CE:Jan 76:91
Presidential Address, Arthur J. Fox, Jr., EI3:July 76: 315:12263
Toward A More United ASCE, Elmer B. Isaak, EI1: Jan 76:7:11859

ASCE (Public Relations)
ASCE Float is a Winner, CE:Feb 76:8
California Coastal Commission Accepts Advice from ASCE on Earthquake Design Controversy, Samuel H. Clark, CE:May 76:85
Public Affairs in the Civil Engineer: A Guideline for Accomplishment, Jewell T. Wood, EI3:July 76:339: 12262

ASCE (Salaries and Fees)
ASCE Membership Profiles, CE:Dec 76:78
CE Compensation Up Nearly 20% Overall in Two Years, ASCE Salary Survey Shows, CE:Mar 76:83
1975 ASCE Salary Survey, Schaefer J. Dixon, Chmn., EI2:Apr 76:225:12090

ASCE (Sections)
ASCE Local Level Public Service Actions Have Big Impact, Virginia Fairweather, CE:June 75:51
California Coastal Commission Accepts Advice from ASCE on Earthquake Design Controversy, Samuel H. Clark, CE:May 76:85
Community Environmental Action Program for Civil Engineers, Gerald R. Dyson, Chmn., EI2:Apr 75: 259:11211
Geotechnical Engineering—and the Law, CE:July 76: 18
Grass Roots Conferences Held in ASCE Zones, CE: Mar 76:88
Toward A More United ASCE, Elmer B. Isaak, EI1: Jan 76:7:11859

ASCE (Special Activities)
ASCE Membership Profiles, CE:Dec 76:78

ASCE (Staff)
Gail Bays to Assist Executive Director at ASCE Hq, CE:Dec 76:82
Indexing Shortcut, CE:Jan 76:91
Retired ASCE Draftsman Dies, CE:Dec 76:82

ASCE (Student Chapters)
Bravo, Connie, CE:Sept 76:109
Motivation of Students Towards Professional Thinking, Milton Alpern, EI3:July 75:413:11435

ASCE (Technical Divisions)
Changes Made in Organization of Society's Technical Activities, CE:July 76:85
Spring Convention to Focus on Water, CE:Feb 76:89

ASCE (Younger Members)
A Short-Cut Plan to Enrich ASCE, Allen W. Hatheway, CE:Nov 75:95

ASCE State-Of-The-Art of Ce Award
1976 ASCE State-of-the-Art of Civil Engineering Award Presented to Richard Field and John A. Lager, CE:Oct 76:101

Asphalt Membranes
Impermeable Asphaltic Concrete Pond Liner, R. Dale Hinkle, Jr., CE:Aug 76:56

Asphalt Pavements
Fly Ash Pavements, Run Ways to Take Off?, Virginia Fairweather and Marvin L. Byington, CE:Aug 75: 57
Porous Friction Course Solves Airport Hydroplaning Problem, Edward A. Johnson and Thomas D. White, CE:Apr 76:90

Asphalts
Economics of Preventive Highway Maintenance, LaRue E. Delp, CE:Dec 76:43

Finite Element Analysis of Miyama Rockfill Dam, Tadatsugu Tanaka and Ryoki Nakano, NMG:June 76:II-650
Fracture of Pavement Materials, Geoffrey E. Blight, TE4:Nov 73:801:10139
Full-Depth Asphalt Airfield Pavements, Matthew W. Witczak and James F. Shook, TE2:May 75:297:11331
Maintenance Management Aids, Eugene L. Marvin, Preprint No.2637, Apr 76, 25pp.
Migration of Subgrade Salts Damages Thin Pavements, Geoffrey E. Blight, TE4:Nov 76:779:12542
Plastic-Reinforced Asphalt Seepage Barrier, Ronald K. Frobel and C. Brent Cluff, IR3:Sept 76:369:12430
Runway Rebuilding with Daily Use, Grant S. Anderson and Kenneth T. Giles, CE:Mar 75:78
Rutting Failure in Full-Depth Asphalt Pavement, Jacob Greenstein and Moshe Livneh, TE4:Nov 75:737:11690
Significance of Variably Confined Triaxial Testing, John J. Allen and Marshall R. Thompson, TE4:Nov 74:827:10911
Sulfur-Asphalt Mixtures Using Poorly Graded Sands, Don Saylak, Bob M. Gallaway, Jon A. Epps and Haffizudin Ahmid, TE1:Feb 75:97:11106

Assessments
Impact Assessment of Power Plants, D. Joseph Hagerty and John E. Heer, PO1:Jan 76:81:11823
Problems in Performing Environmental Assessments, Kenneth L. Dickson, David W. Kern, William F. Ruska and John Cairns, Jr., HY7:July 75:965:11463

Astronomy
Arctic Refraction Study, Gerald W. Johnson, SU1:Dec 76:1:12602

Atlanta
Peachtree City Path Experience: Conception to Implementation, Edwin R. Koons, BP75:Dec 75:186

Atmospheric Models
Statistical Evaluation of Reaeration Prediction Equations, Linfield C. Brown, EE5:Oct 74:1051:10849

Atmospheric Refraction
Arctic Refraction Study, Gerald W. Johnson, SU1:Dec 76:1:12602

Atomic Energy
Development of United States Atomic Energy Commission Regulatory Standards, Robert Minogue, SDNPF:Dec 73:III-110

Attenuation
Flood Routing in Meandering Rivers with Flood Plains, Danny L. Fread, WW76:Aug 76:16

Atterberg Limits
Experimental Work for Active Clays in Mississippi, T. C. Paul Teng and M. Barrett Clisby, TE1:Feb 75:77:11105

Attitude Surveys
Public Acceptance of New Mass Transit System, Roger B. Trent and Cooper N. Redwine, UP1:Aug 76:225:12361

Attitudinal Surveys
Attitudinal Variables in Civil Engineering Design, Wilfred W. Recker and George C. Lee, EI1:Jan 76:55:11862

Australia
Australian Metrication and the Engineer, Carter H. Harrison, Jr., EI2:Apr 76:199:12088
Concrete Replaces Steel in Offshore Coal-Loading Terminal, A. G.F. Eddie, CE:Apr 76:60
The Darwin Cyclone — Valuable Lesson in Structural Design, George R. Walker, Joseph E. Minor and Richard D. Marshall, CE:Dec 75:82
Evaluating Rainfall-Runoff Model Performance, Ian D. Moore and Russell G. Mein, TN: HY9:Sept 76:1390:12368
Metrication — An Australian Non-Event, Carter H. Harrison, Jr., CE:Oct 76:51
Simple Nonlinear Model for Flood Estimation, Russell G. Mein, Eric M. Laurenson and Thomas A. McMahon, HY11:Nov 74:1507:10933
Two-Dimensional Mathematical Water Quality Model, Brian J. Williams and Jon B. Hinwood, EE1:Feb 76:149:11947

Austria
Tunnel under Alps Uses New, Cost-Saving Lining Method, Ladislaus v. Rabcewicz, CE:Oct 75:66

Automata Theory
Approximate Reanalysis Techniques with Substructuring, Ahmed K. Noor and Harold E. Lowder, ST8:Aug 75:1687:11523

Automation
Automated Hydrographic Survey Systems, Pressley L. Campbell, OE75:June 75:1181
Automated Hydrography in the Philadelphia District, Henry R. Spies, Preprint No.2764, Sept 76, 14pp.
Automated Valves for Surface Irrigation Pipelines, Allan S. Humpherys and Robert L. Stacey, IR2:June 75:95:11380
Automatic Control of Large-Scale Combined Sewer Systems, John W. Labadie, Neil S. Grigg and Bruce M. Bradford, EE1:Feb 75:27:11115
Automation in Surveying and Mapping: Present and Future, Morris M. Thompson, Preprint No.2760, Sept 76, 17pp.
Design of Pressure Transient Control System, Morris Driels, HY5:May 75:437:11280
Gradient Methods in Optimum Structural Design, Emil O. Frind and Peter M. Wright, ST4:Apr 75:937:11236
Nearshore Wave Direction Gage, William R. James and Robert J. Hallermeier, WW4:Nov 76:379:12552
Optimization of Long-Span Cold-Formed Truss Purlins, Richard T. Douty and James O. Crooker, ST11:Nov 74:2275:10952
Past and Future of Construction Equipment — Part III, James Douglas, CO4:Dec 75:699:11778
Philadelphia's Water System Automation Plan, Carmen F. Guarino, Joseph V. Radziul, Alan Hess, Patrick R. Cairo, Robert E. Day and John J. Smith, Jr., EE5:Oct 76:953:12473
Planning and Control of Combined Sewerage Systems, William R. Giessner, Robert T. Cockburn, Frank H. Moss, Jr. and Mark E. Noonan, EE4:Aug 74:1013:10744

Automobile Bans
New York City's New Town, David I. Ozerkis, CE:Nov 75:68

Automobile Occupancy
Effect of Energy Shortage and Land Use on Auto Occupancy, Jahanbakhsh Behnam and Robert E. Beglinger, TE2:May 76:255:12142

Automobile Production Statistics
Interstate Highway System, Kneeland A. Godfrey, Jr., CE:Mar 75:51

Automobiles
American Road Building - Fifty Years of Progress, Herbert W. Busching and Randolph Russell, CO3:Sept 75:565:11577
Automobile Energy Requirements, Eric Hirst, TE4:Nov 74:815:10909
Diamonds Are The Way To Go, Vincent D. Paul and Robert G.B. Goodell, Preprint No.2681, Apr 76, 12pp.
Measured Versus Predicted Air Quality Near Highways, Terry L. Miller and Kenneth E. Noll, EE3:June 76:627:12195

Public Response to Carpooling Programs, Alice E. Kidder, Bruce Morgan and Arthur Saltzman, TE3: Aug 76:571:12340

Automobile Safety Characteristics
Pedestrian Versus Bicycle Versus Automobile — A Case Study, John M. Wright, BP75:Dec 75:172

Automobile Tests
Dispersion of Pollutants in Automobile Wakes, Dennis D. Lane and James J. Stukel, EE3:June 76: 571:12189

Automobile Usage
Resolving Conflicts Between People and Cars, Herbert S. Levinson, BP75:Dec 75:97

Average Flow
Determining Streamflows from Geomorphic Parameters, John F. Orsborn, IR4:Dec 74:455: 10986

Awards
Boase Award to Cameron, CE:Apr 76:95
Ralph B. Peck is Washington Award Winner, CE:Feb 76:92
Winners of 1975 Highway Environment Awards; Competition Open for '76, CE:June 76:12

Awards & Prizes
Award Honors Harold Larsen, CE:Nov 76:83
Building Named in National Steel Contest, CE:Jan 76:12
Most Beautiful Bridges Named by AISC, CE:Sept 76: 17

Axial Compression
Axial Compression of Formed-Faced Sandwich Panels, Ken P. Chong, Pei-Chung Liu and Kjell Oistein Engen, Preprint No.2807, Sept 76, 22pp.

Axial Load
Behavior of Drilled Piers under Axial Loading, Lymon C. Reese, Fadlo T. Touma and Michael W. O'Neill, GT5:May 76:493:12135
Collapse Load Analysis of Frames Considering Axial Forces, M. Z. Cohn and Tariq Rafay, EM4:Aug 74: 773:10757

Axial Loads
Some Aspects of Theory and Applications of Numerical Methods, Chandrakant S. Desai, NMG: June 76:1-58

Axial Strain
Strain Rate Behavior of Compacted Silt, Nikhilesh Roy and Parth Sarathi, GT4:Apr 76:347:12024

Axial Stress
Inelastic Behavior of Wood Beam-Columns, Borislav D. Zakic, ST2:Feb 75:417:11145

Backfills
Analysis of Backpacked Liners, Sidiq M. Dar and Robert C. Bates, GT7:July 76:739:12242
Synthesis of Finite Element Analysis of Culverts, John F. Abel and James Neil Kay, NMG:June 76: II-873

Backwashing
Determining Specific Deposit by Backwash Technique, Kou-ying Hsiung, EE2:Apr 74:353: 10449
Developments in Backwashing of Granular Filters, John L. Cleasby, Edward W. Stangl and Gary A. Rice, EE5:Oct 75:713:11642

Backwater
Diversion Tunnel Capacity Without Backwater in Diverted Flow, Georgije Hajdin and Cedo Maksimovic, WW76:Aug 76:993
Extreme Roughness of Natural River Channel, Hans J. Leutheusser and W. Orville Chisholm, HY7:July 73:1027:9831
Flood Control Arrangements for River Junctions, Mostafa M. Soliman, WW76:Aug 76:1057
Flood Routing Through River Junctions, Ben Chie Yen and A. Osman Akan, WW76:Aug 76:212
Flow at Grade-Break from Mild to Steep Slopes, Richard G. Weyermuller and M. Gamal Mostafa, HY10:Oct 76:1439:12458
Giuseppe Venturoli, Pioneer in Channel Studies, Rene Chevray, HY10:Oct 76:1533:12488
Hydraulic Modeling Techniques in a Backwater Area, Phil G. Combs, Nolan K. Raphelt and James E. Foster, WW76:Aug 76:232
Laboratory Study of Energy Losses at Storm Sewer Junctions, Jan R. Prins and David R. Townsend, IR76:July 76:609
Upstream Flood Lowering in Reservoirs, Bob Buehler, HY2:Feb 76:151:11911

Backwater Profiles
Levee System Reliability Along a Confluence Reach, Ferenc Szidarovsky, Lucien Duckstein and Istvan Bogardi, EM5:Oct 75:609:11621

Bacteria
Chlorine Disinfection of Low Temperature Waters, Leroy C. Reid, Jr. and Dale A. Carlson, EE2:Apr 74:339:10443
Fate of Wastewater Bacteria and Viruses in Soil, Charles P. Gerba, Craig Wallis and Joseph L. Melnick, IR3:Sept 75:157:11572
Urban Runoff Pollution Control—State-of-the-Art, Richard Field and John A. Lager, EE1:Feb 75:107: 11129
Water to Air Bacterial Transfer by Bursting Bubbles, D. Wozniak, M. Kiwak, C. Cahoon and Robert H. Edgerton, EE3:June 76:567:12197

Bacterial Endocarditis
Brick Masonry Shells, Clayford T. Grimm, ST1:Jan 75:79:11050

Bacteriophage
Virus-Coal Sorption Interaction, Pushpavadan P. Oza and Malay Chaudhuri, EE6:Dec 76:1255:12633

Baffles
Biomass Distribution and Kinetics of Baffled Lagoons, James H. Reynolds, Stephen B. Nielson and E. Joe Middlebrooks, EE6:Dec 75:1005:11787
Stilling Basin Design for Low Froude Number, Nani G. Bhowmik, HY7:July 75:901:11448
Vortex Suppression in Stilling Pond Overflow, Y. R. Reddy and John Pickford, HY11:Nov 74:1685: 10969

Ballast
State-of-the-Art of Ballastless Track at-Grade, Walter L. Wheeler, TE1:Feb 76:131:11929

Bandwidth
Node Numbering Optimization in Structural Analysis, Joaquim S.N. Rodrigues, ST2:Feb 75:361: 11117

Bangladesh
Irrigation Development in Bangladesh, Stephen V. Allison and Kazi F. Jalal, IR1:Mar 74:69:10394

Bank Protection
Environmental Aspects—Sacramento Bank Protection, Charles S. Mifkovic and Margaret S. Petersen, HY5:May 75:543:11326

Barges
Concrete Barge of First Totally Offshore LPG Facility, Arthur R. Anderson, CE:Apr 76:58
Hardinge Bridge Span Repair, Amitabha Ghosal, Jagadish C. Ganguly, Himangsu K. Banerjee and Mahesh P. Kapoor, CO4:Dec 74:631:11034
Lower Minnesota River — Capacity Study, Amardo J. Romano, WW76:Aug 76:687
Sinkage and Resistance for Ships in Channels, John S. McNown, WW3:Aug 76:287:12291

Bar Graphs
VPM Scheduling for High-Rise Buildings, James J. O'Brien, CO4:Dec 75:895:11773

Barriers
Thames Barrier Project, P. A. Cox, P. J. Clark and G. Miller-Richards, WW76:Aug 76:852

Bars
Elastic-Plastic Torsion of Nonhomogeneous Bars, Carl T. Herakovich and Rafik Y. Itani, EM5:Oct 76:757:12446
Reliability of Prismatic Bars in Tension, Emilio Rosenblueth and Alfredo Careaga, TN: EM3:June 76:563:12168

Bart
Tunnel Survey and Tunneling Machine Control, Edward W. Peterson and Peter Frobenius, SU1:Sept 73:21:10008

Base Courses
Soil Moisture Movement by Temperature Gradient, Arved J. Raudkivi and Nguyen Van U'u, GT12:Dec 76:1225:12645

Base Flow
Effect of Separation Angle on Vortex Streets, John E.L. Simmons, EM5:Oct 75:649:11653
Effects of Man on Low Flows, Henry C. Riggs, IR76: July 76:306
Investigation of Two-Regime Well Flow, Pongsarl Huyakorn and Colin R. Dudgeon, HY9:Sept 76: 1149:12383

Base Pressure
Base Pressure of Oscillating Circular Cylinders, Peter K. Stansby, EM4:Aug 76:591:12311

Basic Research
Goals for Education and Research in Construction, Boyd C. Paulson, Jr., CO3:Sept 76:479:12393

Basins
Solid Particle Settlement in Open-Channel Flow, Ruh-Ming Li and Hsieh W. Shen, HY7:July 75:917: 11460

Batch Processing (Data)
FAR — A Self-Teaching Frame Analysis Routine, Yehia Bahel-El-Din and Senol Utku, Preprint No.2737, Sept 76, 44pp.

Bathymetry
Automated Hydrographic Survey Systems, Pressley L. Campbell, OE75:June 75:1181
Channel Entrance Response to Jetty Construction, J. M. Kieslich and Curtis Mason, OE75:June 75:689
Sediment Transport Study, Offshore, New Jersey, Joseph T. DeAlteris, James R. Roney, Lloyd E. Stahl and Chris Carr, OE75:June 75:225

Bayes Theorem
Bayesian Approach to Tile Drain Design, Andre Musy and Lucien Duckstein, IR3:Sept 76:317: 12390
Safety Factor Evaluation for Single Piles in Sand, James Neil Kay, GT10:Oct 76:1093:12494

Bays (Structural)
Approximate Analysis of Multistory Multibay Frames, Paul C.K. Chan, Arthur C. Heidebrecht and Wai K. Tso, ST5:May 75:1021:11302

Bays (Topographic Features)
Renewal Characteristics of Chesapeake Bay, A. Y. Kuo, Evon P. Ruzecki and Ching S. Fang, OE75: June 75:1065
Wave Climate at Plymouth, Massachusetts, Albert L. Robitaille, OE75:June 75:1152

Beach Erosion
Remote Sensing of Turbidity Plumes in Lake Ontario, Edward J. Pluhowski, TE3:Aug 76:475: 12306

Beaches
Currents and Sand Transport on Beaches: A Review, Paul D. Komar, Preprint No.2707, Apr 76, 27pp.
Depth of Marine Pipeline Burial Near Shore, Melville S. Priest and Keith H. Denson, Preprint No.2636, Apr 76, 6pp.
Field Performance of Permeable Breakwater, John C. Ludwick, Peter Fleischer, Ronald E. Johnson and Gerald L. Shideler, WW4:Nov 75:357:11703
Longshore Currents and Sand Transport on Beaches, Paul D. Komar, OE75:June 75:334
New Method for Beach Erosion Control, Jerry L. Machemehl, Thomas J. French and Norden E. Huang, OE75:June 75:142
Surface Shear Waves, D. Howell Peregrine, HY9:Sept 74:1215:10809

Beach Nourishment
Coastal Engineering—State-of-the-Art Summary, Kiyoshi Horikawa, OE75:June 75:217
Placing Artificial Beach Nourishment, J. William Kamphuis and S. G. Bridgeman, OE75:June 75:197
Simulation of Shoreline and Nearshore Currents, Tamio Sasaki, OE75:June 75:179

Beam Columns
Analysis of Beam-Columns on Elastic Supports, R. Richard Avent, Dieter Bounin and Hee Chong Rhee, TN: ST3:Mar 76:691:11956
Design Criteria for H-Columns under Biaxial Loading, Negussie Tebedge and Wai F. Chen, ST3: Mar 74:579:10400
Further Aspects of Design by PΔ Model, Brian R. Wood, Denis Beaulieu and Peter F. Adams, ST3: Mar 76:487:11973
Inelastic Behavior of Wood Beam-Columns, Borislav D. Zakic, ST2:Feb 75:417:11145
Inelastic Spatial Stability of Restrained Beam-Columns, Sriramulu Vinnakota and Pentti Aysto, ST11:Nov 74:2235:10919
Literature Surveys of Cold-Formed Structures, Ken P. Chong, Chmn., Preprint No.2807, Sept 76, 59pp.
Preliminary Plastic Design of Tall Steel Frames, M. Bassam El Hafez and Graham H. Powell, ST9:Sept 74:1837:10796
Technique for Formulating Beam Equations, David W. Murray, EM5:Oct 75:561:11613
Ultimate Strength of Tubular Beam-Columns, A. L. Wagner, W. H. Mueller and Hacik Erzurumlu, Preprint No.2695, Apr 76, 25pp.

Beams
Aluminum Beam Webs Under Concentrated Loads, Maurice L. Sharp, ST76:Aug 76:569
A Brief History of the Steel Joist Industry, Robert C. Macomber, Preprint No.2758, Sept 76, 12pp.
Technique for Formulating Beam Equations, David W. Murray, EM5:Oct 75:561:11613

Beams (Structural)
Design of Reinforced Concrete Spandrel Beams, Thomas T.C. Hsu and Kenneth T. Burton, ST1:Jan 74:209:10277
Torsional Strength of Prestressed Concrete Beams, H. Roger Woodhead and Arthur E. McMullen, ST5: May 74:881:10545

Beams (Supports)
Analysis and Design of Griplam Nailed Connections, Ricardo O. Foschi and Jack Longworth, ST12:Dec 75:2537:11766
Analysis of Fatigue of Welded Crane Runway Girders, David A. Demo and John W. Fisher, ST5: May 76:919:12106
Beam Deflections by Numerical Integration, Stephen J. Speicher, CE:Dec 75:67
Buckling of Composite Beams in Negative Bending, Sumio Hamada and Jack Longworth, ST11:Nov 74: 2205:10917

Buckling of Inelastic I-Beams under Moment Gradient, Sritawat Kitipornchai and Nicholas S. Trahair, ST5:May 75:991:11295
Collapse of Curved Reinforced Concrete Beams, Ian J. Jordaan, Magdi M. A. Khalifa and Arthur E. McMullen, ST11:Nov 74:2255:10951
Deflection and Ponding of Steel Joists, R. Richard Avent, ST7:July 76:1399:12241
Design of I-Shaped Beams with Diaphragm Bracing, Samuel J. Errera and Tamirisa V.S.R. Apparao, ST4:Apr 76:769:12051
Discrete Model of Beams on Elastic Foundation, Gregory Szuladzinski, EM6:Dec 75:839:11814
Ductile Behavior of Coupled Shear Walls, Thomas Paulay and Arumbakkam R. Santhakumar, ST1:Jan 76:93:11852
Elastic Behavior of Tapered Monosymmetric I-Beams, Sritawat Kitipornchai and Nicholas S. Trahair, ST8:Aug 75:1661:11479
Full-Scale Tests on Tapered and Curved Glulam Beams, Vijaya K.A. Gopu and James R. Goodman, ST12:Dec 75:2609:11794
History of Steel Beam Design, Theodore V. Galambos, Preprint No.2776, Sept 76, 21pp.
Inelastic Buckling of Simply Supported Steel I-Beams, Sritawat Kitipornchai and Nicholas S. Trahair, ST7:July 75:1333:11419
Inelastic Lateral Buckling of Determinate Beams, David A. Nethercot and Nicholas S. Trahair, ST4: Apr 76:701:12020
Inelastic Stability of Beams under Biaxial Bending, Chesada Kasemset, Fumio Nishino and Seng-Lip Lee, EM5:Oct 74:965:10881
Inelastic Strength of Cold-Formed Steel Beams, H. Peter Reck, ST11:Nov 75:2193:11713
Inelastic Sway Buckling of Multistory Frames, Francois Cheong-Siat-Moy, ST1:Jan 76:65:11848
Interactive Computer Design of Reinforced Concrete Beams and Columns, Melvin R. Ramey, Preprint No.2737, Sept 76
Interactive Nonlinear Structural Analysis, Howard B. Harrison, ST7:July 76:1353:12235
Large-Deflection Spatial Buckling of Thin Walled Beams and Frames, Zdenek P. Bazant and Mahjoub El Nimeiri, EM6:Dec 73:1259:10247
Matrix Analysis of Structure-Foundation Interaction, Fukashi Miyahara and John G. Ergatoudis, ST1:Jan 76:251:11836
Method of Developing Optimum Tolerances, Emilio Rosenblueth and Alejandro Asfura, ST2:Feb 76: 323:11889
Optimal Design of Multiload Multispan Systems, George I.N. Rozvany, TN: EM6:Dec 76:1085: 12591
Optimization of Long-Span Cold-Formed Truss Purlins, Richard T. Douty and James O. Crooker, ST11:Nov 74:2275:10952
Optimization of Unstiffened Hybrid Beams, Ken P. Chong, ST2:Feb 76:401:11907
Plastic Design of Web Openings in Steel Beams, Marvin A. Larson and Kirit N. Shah, ST5:May 76: 1031:12155
Plastic Rotations in Continuous Encased Beams, Subhash Chandra Maiti, ST6:June 75:1269:11375
Post-Buckling of Redundant I-Beams, Scott T. Woolcock and Nicholas S. Trahair, EM2:Apr 76: 293:12054
Post-Buckling of Redundant Rectangular Beams, Scott T. Woolcock and Nicholas S. Trahair, EM4: Aug 75:301:11491
Post-Crushing Behavior of Unbound Concrete Beams, Mohammad Iqbal and David S. Hatcher, ST11:Nov 75:2303:11719
Post-Local-Buckling Behavior of Continuous Beams, Shien T. Wang and Sheng S. Yeh, ST6:June 74: 1169:10595
Practical Applications of Structural Optimization, George G. Goble and Fred Moses, ST4:Apr 75:635: 11267
Preliminary Plastic Design of Tall Steel Frames, M. Bassam El Hafez and Graham H. Powell, ST9:Sept 74:1837:10796
Prestressed Box Beams under Combined Loading, David W. Johnston and Paul Zia, ST7:July 75:1313: 11421
Rainwater Ponding on Beam-Girder Roof Systems, R. Richard Avent and William G. Stewart, ST9: Sept 75:1913:11564
Shakedown of Beams on Flexible Supports, Dale G. Eyre and Theodore V. Galambos, ST5:May 76:935: 12101
Shear Analysis of Tapered Beams, Ken P. Chong, William D. Swanson and Robert B. Matlock, ST9: Sept 76:1781:12411
Shear Stresses in Beams with Discontinuity in Depth, John Marshall and Ravindra P. Jategaonkar, ST7: July 75:1393:11424
Stiffness Matrices for Beam Members Including Warping Torsion Effects, John L. Meek and Peter Swannell, TN: EM1:Feb 76:193:11884
Strength of Beams with Eccentric Reinforced Holes, Tsong-Miin Wang, Robert R. Snell and Peter B. Cooper, ST9:Sept 75:1783:11540
Subassemblage Concept for Tall Frame Analysis, Graham H. Powell and M. Bassam El Hafez, ST8: Aug 74:1611:10739
Tension Proof Loading for Southern Pine Beams, M. Dee Strickler and Roy F. Pellerin, ST3:Mar 76:645: 11978
Theory for Concrete Beams in Torsion and Bending, Kevin D. Below, B. Vijaya Rangan and A. Stanley Hall, ST8:Aug 75:1645:11480
Torsional Strength of Prestressed Concrete Beams, H. Roger Woodhead and Arthur E. McMullen, ST5: May 74:881:10545
Torsion-Bending-Shear Interaction for Concrete Beams, Lennart Elfren, Inge Karlsson and Anders Losberg, ST8:Aug 74:1657:10749
Ultimate Torque of Reinforced Concrete Beams, David J. Victor, Narayanan Lakshmanan and Narayanan Rajagopalan, ST7:July 76:1337:12249
Wall-Beam Frames under Static Lateral Load, Allen L. Mee, Ian J. Jordaan and Michael A. Ward, ST2: Feb 75:377:11121
Warping and Distortion at I-Section Joints, Porpan Vacharajittiphan and Nicholas S. Trahair, ST3:Mar 74:547:10390

Beam Tests

Bending Test for Compacted Clays, Arif Ajaz and Richard H.G. Parry, GT9:Sept 76:929:12404
Tests and Analysis of Beam-to-Column Web Connections, Wai F. Chen and Glenn P. Rentschler, ST76:Aug 76:957

Bearing Capacity

Bearing Capacity Analysis of Reinforced Earth Slabs, Jean Binquet and Kenneth L. Lee, GT12:Dec 75: 1257:11793
Bearing Capacity of Offshore Gravity Structures, Surendra K. Saxena, W. M. Kilkenny and Joseph A. Fischer, OE75:June 75:450
Bearing Capacity Tests on Reinforced Earth Slabs, Jean Binquet and Kenneth L. Lee, GT12:Dec 75: 1241:11792
Bearing Strength of Reinforced Concrete Blocks, Sanat Kumar Niyogi, ST5:May 75:1125:11325
Behavior of Bored Piles in Sand, Fadlo T. Touma and Lymon C. Reese, GT7:July 74:749:10651
Concrete Bearing Strength—Support, Mix, Size Effect, Sanat Kumar Niyogi, ST8:Aug 74:1685: 10765
Inelastic Behavior of Wood Beam-Columns, Borislav D. Zakic, ST2:Feb 75:417:11145
In Situ Measurement of Soil Properties, Harvey E. Wahls, Chmn., GT75:June 75
Large-Scale Model Test of Drilled Pier in Sand, Samuel P. Clemence and William F. Brumund, GT6:June 75:537:11369
Light-Gage Steel Bolted Connections without Washers, Ken P. Chong and Robert B. Matlock, ST7:July 75:1381:11433
Limit Load of a Foundation in a Strain-Softening Soil, Paolo Biondi, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:I-591

Numerical Design-Analysis for Piles in Sands, Chandrakant S. Desai, GT6:June 74:613:10617
On an Improved Application of Kotter's Equation, Hakuju Yamaguchi, Tsutomu Kimura and Nariaki Fuji-i, NMG:June 76:I-183
Pressuremeter and Laboratory Test Correlations for Clays, Robert G. Lukas and Bruno LeClerc de Bussy, GT9:Sept 76:945:12410
Reducing Negative Friction with Bitumen Slip Layers, Alphonsus I. M. Claessen and Endre Horvat, GT8:Aug 74:925:10764
Rutting Failure in Full-Depth Asphalt Pavement, Jacob Greenstein and Moshe Livneh, TE4:Nov 75:737:11690
Strength and Related Properties of Brick Masonry, Clayford T. Grimm, ST1:Jan 75:217:11066
Stress Analysis of Strain-Softening Materials, Stein Sture and Hon-Yim Ko, NMG:June 76:I-580
Torsion-Bending-Shear Interaction for Concrete Beams, Lennart Elfren, Inge Karlsson and Anders Losberg, ST8:Aug 74:1657:10749

Bearing Piles
Reducing Negative Friction with Bitumen Slip Layers, Alphonsus I. M. Claessen and Endre Horvat, GT8:Aug 74:925:10764

Beautification
Highway in Harmony with Its Environment, Cade L. Benson, CE:Sept 76:56

Bed Forms
Analysis of Bed Profiles in Sand Bed Canals, Khalid Mahmood and Hassan Ahmadi-Karvigh, WW76:Aug 76:564
Bed Form Response to Nonsteady Flows, D. Michael Gee, HY3:Mar 75:437:11195
Characteristics of Proportional Weirs, D. Chandrasekaran and Nagar S. Lakshmana Rao, HY11:Nov 76:1677:12560
Factors Determining Bed Forms of Alluvial Streams, Vito A. Vanoni, HY3:Mar 74:363:10396
Local Erosion Caused by Rapid Forced Infiltration, Brian B. Willetts and Michael E. Drossos, HY12:Dec 75:1477:11796
Resistance to Flows in Alluvial Channels, ChiEmeka G. Ilo, HY6:June 75:665:11352
Sediment Movement in Tubbs Inlet, North Carolina, Jerry L. Machemehl, Robert P. Masterson, Jr. and Victor V. Cavaroc, Jr., OE75:June 75:313
Variation of Suspended Sediment in Sand Bed Canals, Gary L. Eyster and Khalid Mahmood, WW76:Aug 76:924

Bed Load
Bed Form Response to Nonsteady Flows, D. Michael Gee, HY3:Mar 75:437:11195
The Bed-Load Function, Spyridon Beltaos, TN: HY1:Jan 76:131:11820
Bedload Sampling by Pumping, H. I. Langley, WW76:Aug 76:945
Evaluation of a Bedload Sediment Sampler for USA-Canada Watershed Studies, Thomas F. Zimmie, Young S. Paik and Carsten H.L. Floess, IR76:July 76:40
Field Research in Large Sand Bed Channels, Khalid Mahmood and Riaz Nazir Tarar, WW76:Aug 76:1318
Incipient Sediment Motion in Entrances with Shell Beds, Ashish J. Mehta and Bent A. Christensen, WW76:Aug 76:960
Integral-Equation Analysis of Flows Over Eroding Beds, S. N. Prasad and Carlos V. Alonso, WW76:Aug 76:760
Local Erosion Caused by Rapid Forced Infiltration, Brian B. Willetts and Michael E. Drossos, HY12:Dec 75:1477:11796
New Diver-Operated Bedload Sampler, Dennis G. Waslenchuk, HY6:June 76:747:12179
Remote Classification of Marine Sediments, Arthur S. Westneat, DIEE:Jan 76:289
Side Scan Sonar Views of Channel Disturbances Associated with Marine Traffic and Dredging, Larry S. Slotta, DIEE:Jan 76:226
Stochastic Analysis of Dune Bed Profiles, Baum K. Lee and Harvey E. Jobson, HY7:July 74:849:10657
Stochastic Characteristics of Sediment Motions, Hin Fatt Cheong and Hsieh W. Shen, HY7:July 76:1035:12269
Stochastic Models of Sediment Motion on Flat Bed, Che S. Hung and Hsieh W. Shen, HY12:Dec 76:1745:12639
Tests of Scour Protection for Bridge Piers, Chesley J. Posey, HY12:Dec 74:1773:11017
Variation of Suspended Sediment in Sand Bed Canals, Gary L. Eyster and Khalid Mahmood, WW76:Aug 76:924

Bedload Movement
The Bed-Load Function, Spyridon Beltaos, TN: HY1:Jan 76:131:11820
Bedload Sampling by Pumping, H. I. Langley, WW76:Aug 76:945
Boundary Shear Stress as an Index of Hydraulic Jump Performance, Ronald E. Nece and Khalid Mahmood, WW76:Aug 76:978
Evaluation of a Bedload Sediment Sampler for USA-Canada Watershed Studies, Thomas F. Zimmie, Young S. Paik and Carsten H.L. Floess, IR76:July 76:40
Field Research in Large Sand Bed Channels, Khalid Mahmood and Riaz Nazir Tarar, WW76:Aug 76:1318
Incipient Sediment Motion in Entrances with Shell Beds, Ashish J. Mehta and Bent A. Christensen, WW76:Aug 76:960
Longitudinal Dispersion for Flow over Rough Beds, Nabil D.Abd El-Hadi and Kersi S. Davar, HY4:Apr 76:483:12049
Sediment Inertia as Cause of River Antidunes, Gary Parker, HY2:Feb 75:211:11127
Sediment Transport in Smooth Fixed Bed Channels, Pavel Novak and Chandramouli Nalluri, HY9:Sept 75:1139:11556
Stability Problems for the Navigation Channel in a Tidal River, Egon Giese, WW76:Aug 76:280
Study of Artificial Cutoffs on Gravel-Bed Rivers, Dale I. Bray and Andrew J. Cullen, WW76:Aug 76:1399

Bedrock
Determining Bedrock Elevation by Acoustic Sounding Technique, Wesley E. Stimpson, Gary S. Brierley and Thomas K. Liu, GT76:Aug 76:1
H-Bearing Piles in Limestone and Clay Shales, William D. Ashton and Paul H. Schwartz, GT7:July 74:787:10667
Stiffness Coefficients for Embedded Footings, Gordon R. Johnson, Paul P. Christiano and Howard I. Epstein, GT8:Aug 75:789:11522

Bed Roughness
Longitudinal Dispersion for Flow over Rough Beds, Nabil D.Abd El-Hadi and Kersi S. Davar, HY4:Apr 76:483:12049

Behavior Research
Pedestrian Behavior: A Study of the Organization of Co-Active Behavior, Ronald Goodrich, BP75:Dec 75:374

Bending
Bending Test for Compacted Clays, Arif Ajaz and Richard H.G. Parry, GT9:Sept 76:929:12404
Circular Steel Tubes in Bending, Donald R. Sherman, Preprint No.2694, Apr 76, 27pp.
Design of Columns Subject to Biaxial Bending, John Springfield, Preprint No.2750, Sept 76, 21pp.
Elastic Behavior of Tapered Monosymmetric I-Beams, Sritawat Kitipornchai and Nicholas S. Trahair, ST8:Aug 75:1661:11479
Inelastic Behavior of Wood Beam-Columns, Borislav D. Zakic, ST2:Feb 75:417:11145
Inelastic Spatial Stability of Restrained Beam-Columns, Sriramulu Vinnakota and Pentti Aysto, ST11:Nov 74:2235:10919

Inelastic Stability of Beams under Biaxial Bending, Chesada Kasemset, Fumio Nishino and Seng-Lip Lee, EM5:Oct 74:965:10881
Numerical Solution of Moderately Thick Plates, Rajabhau S. Deshmukh and Robert R. Archer, EM5:Oct 74:903:10860
Research Benefits in Water Resources Construction, William P. Simmons and William R. Groseclose, CO3:Sept 76:5277:12421
Seismic Analysis of Underground Structural Elements, Hemant H. Shah and Shih-Lung Chu, PO1:July 74:53:10648
Test of Circular Steel Tubes in Bending, Donald R. Sherman, ST11:Nov 76:2181:12568
Theory for Concrete Beams in Torsion and Bending, Kevin D. Below, B. Vijaya Rangan and A. Stanley Hall, ST8:Aug 75:1645:11480
Transverse Bending of Laminated Anisotropic Plates, Eric Reissner, TN: EM3:June 76:559:12168
Wheel Load Stress Concentrations on Crane Runway Girders, G. J.K. Asmis, ST76:Aug 76:1005

Bending Moments
Calculation of Raft Foundations on Clayey Silts, Quirin Laumans and Hermann Schad, NMG:June 76:1-475
Tests and Analysis of Beam-to-Column Web Connections, Wai F. Chen and Glenn P. Rentschler, ST76:Aug 76:957

Bending Stress
Bending Strength of Rectangular Hallow Sections, Ray R. Ayers, James M. Nash and William J. Graff, ST76:Aug 76:439
FE Analyses of Rafts on Viscoelastic Foundations, Yang H. Huang, NMG:June 76:1-463

Bend Properties
Aluminum Beam Webs Under Concentrated Loads, Maurice L. Sharp, ST76:Aug 76:569

Bends (Hydraulic)
Effects of Meandering in Alluvial Streams, Yasuo Onishi, Subhash C. Jain and John F. Kennedy, HY7:July 76:899:12248
Shear Distribution in Bends in Rectangular Channels, Dharam V. Varshney and Ramchandra J. Garde, HY8:Aug 75:1053:11513

Benefit Cost Analysis
Agricultural Benefit Assessment from Flood Control, Krishan P. Singh, IR76:July 76:264
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., Preprint No.2643, Apr 76, 10pp.
Discounted Cash Flow Analysis to Select Equipment, Richard Briller, EE3:June 76:595:12190
Distribution of Benefits of Public Transit Projects, Arun Chatterjee and Kumares C. Sinha, TE3:Aug 75:505:11497
Economic Analysis of Residential Land-Use Alternatives, David C. Curtis and Richard H. McCuen, UP2:Nov 75:109:11678
Economic Measure of Benefits of Transportation, John F. Brotchie, TE1:Feb 76:17:11888
Economics and Financial Aspects of Canadian Irrigation and Drainage Projects, Harry B. Rosenberg, IR76:July 76:640
Economics and Water Resources Planning in America: 1776-1976, L. Douglas James and Jerry R. Rogers, Preprint No.2754, Sept 76, 30pp.
Economics of Permanent Flood-Plain Evacuation, Nolan L. Johnson, Jr., IR3:Sept 76:273:12378
Engineering Risk Management of Natural and Man-Made Hazards, Larry T. Lee and Jon D. Collins, Preprint No.2757, Sept 76, 30pp.
Formula for Markup for Profit, Marvin Gates and Amerigo Scarpa, TN: CO4:Dec 76:685:12590
Highway User Benefit/Cost Analysis in California, Heinz Heckeroth and Charles E. Paulsen, TE4:Nov 76:605:12524
Interdisciplinary Approach to Central City Development, Albert A. Dorman, Preprint No.2749, Sept 76, 10pp.
Outlet Drainage — An Assessment of Environmental Effects, J. C. Day, R. F. Brady and M. J. Staite, IR76:July 76:445
A Potential Irrigation-Conservation Program for 300,000 Acres in Northern Maine, Robert G. Hunt, Preprint No.2762, Sept 76, 23pp.
Problems in Long-Life Fatigue Assessment for Fixed Offshore Structures, Peter W. Marshall, Preprint No.2638, Apr 76, 24pp.
Project Formulation: Economic and Financial Aspects, Gary D. Cobb, IR76:July 76:660
Review of Structural Optimization Techniques, Kenneth F. Reinschmidt, Preprint No.2765, Sept 76, 20pp.
Some Aspects of Theory and Applications of Numerical Methods, Chandrakant S. Desai, NMG: June 76:1-58
Staff Versus Administration Versus Board or the Planning Process Organized for Consensus Instead of Conflict, James Falick, David Burdick and Henry Winkelman, Preprint No.2701, Apr 76, 23pp.
Systems Analysis and Solid Waste Planning, Robert M. Clark and James I. Gillean, EE1:Feb 74:7:10316
Will Industry Meet Water-Quality Goals?, Eugene E. Dallaire, CE:Dec 75:68

Benefit-Cost Ratios
High-Accident Spot-Improvement Program, Kenneth R. Agent, John A. Deacon and Robert C. Deen, TE2:May 76:427:12123
Quantifying Impact of Transportation Systems, William L. Smith, UP1:Mar 74:79:10416
Seismic Design Decision Analysis, Robert V. Whitman, John M. Biggs, C. Allin Cornell, John E. Brennan, III, Richard L. de Neufville and Erik H. Vanmarcke, ST5:May 75:1067:11309

Benefits
Public Participation from a Utility's Viewpoint: Benefits and Problems, Henry W. Cheney, EFEEC: Aug 75:373
Water Recreation and Benefit Estimation for Lake Livingston (Texas), Charles W. Warner, Jr., Pat B. Fowler, G. E. Munger, Jr. and Jerry R. Rogers, Preprint No.2682, Apr 76, 16pp.

Benthic Fauna
Distribution of Toxic Heavy Metals in Marine and Freshwater Sediments, J. M. Brannon, R. M. Engler, J. R. Rose, P. G. Hunt and I. Smith, DIEE: Jan 76:455
Impact on Marine Benthos of Waste Water Discharge, Gerald T. Orlob and Dennis A. O'Leary, Preprint No.2658, Apr 76, 25pp.

Benthic Flora
Distribution of Toxic Heavy Metals in Marine and Freshwater Sediments, J. M. Brannon, R. M. Engler, J. R. Rose, P. G. Hunt and I. Smith, DIEE: Jan 76:455

Benthos
Impact on Marine Benthos of Waste Water Discharge, Gerald T. Orlob and Dennis A. O'Leary, Preprint No.2658, Apr 76, 25pp.

Bentonite
Diaphragm Wall Construction Techniques, Kevin L. Nash, CO4:Dec 74:605:11025
Pressure Grouting Foundation on Teton Dam, Peter P. Aberle, GT76:Aug 76:245
Stability of Trenches Filled with Fluids, Kevin L. Nash, CO4:Dec 74:533:11006

Berths
Supertanker Fixed Berth in Open Ocean, Atsushi Seiki and Yasumasha Shimada, CE:Apr 76:56

Biaxial Stresses
Design of Columns Subject to Biaxial Bending, John Springfield, Preprint No.2750, Sept 76, 21pp.

Inelastic Spatial Stability of Restrained Beam-Columns, Sriramulu Vinnakota and Pentti Aysto, ST11:Nov 74:2235:10919
Inelastic Stability of Beams under Biaxial Bending, Chesada Kasemset, Fumio Nishino and Seng-Lip Lee, EM5:Oct 74:965:10881

Bibliographies
American Wooden Bridges, Neal FitzSimons, Chmn., AWB:76, 176pp.
Bibliography on Timber Highway Bridge Design, Thomas G. Williamson, Chmn., ST1:Jan 75:1:11042
Bibliography on Wood and Plywood Diaphragms, J. M. Carney, ST11:Nov 75:2423:11737
Civil Engineering Applications of Remote Sensing, David J. Barr and Wesley P. James, TE2:May 75:279:11300
Composite Steel-Concrete Construction, Ivan M. Viest, Chmn., ST5:May 74:1085:10561
Folded-Plate Structures, Jerome S.B. Iffland, Preprint No.2807, Sept 76, 66pp.
A Home-Study Program on Civil Engineering Management, Kenneth P. Buchert, CE:Mar 75:81
Survey of Current Research on Cold-Formed Structures, Shien T. Wang, Chmn., Preprint No.2807, Sept 76, 42pp.

Bicycle Accidents
Bicycle Accidents in the City of Milwaukee, Zuhair Abou-Loghd, Arun Chatterjee and Kumares C. Sinha, TE2:May 76:347:12120
Bikeway Hazards, Robert H. Wortman, BP75:Dec 75:320
San Diego-Coronado Bay Bridge: Bicycle Shuttle Service, Gene Pound and Alan McCuen, BP75:Dec 75:326
A Survey of Class I Bikeway Pavements, Thomas H. Crawford, R. Gary Hicks, James J. Berryhill and James S. Lai, BP75:Dec 75:278
Teaching the Proper Use of Bicycle Facilities, John Forester, BP75:Dec 75:533

Bicycle Handling
Bicycle Facility Design Considerations: A Summary, John E. Baerwald, BP75:Dec 75:259
San Diego-Coronado Bay Bridge: Bicycle Shuttle Service, Gene Pound and Alan McCuen, BP75:Dec 75:326

Bicycle Rider Behavior
Education of Bicycle Riders - How Much is Enough?, John E. Baerwald, BP75:Dec 75:545
Teaching the Proper Use of Bicycle Facilities, John Forester, BP75:Dec 75:533

Bicycle Rider Skill Tests
Education of Bicycle Riders - How Much is Enough?, John E. Baerwald, BP75:Dec 75:545

Bicycles
Bicycle Facility Design Considerations: A Summary, John E. Baerwald, BP75:Dec 75:259
Bicycles and Traffic, Harold C. Munn, TE4:Nov 75:753:11729
Bike and Pedestrian Pathways, CE:Nov 75:72
Bikeway Hazards, Robert H. Wortman, BP75:Dec 75:320
Class I Bikeway Geometrics, Thomas H. Crawford, BP75:Dec 75:308
The Current Status of Transportation Control Plans, Gary Hawthorn, BP75:Dec 75:557
Economic Evaluation Techniques for Bicycle-Pedestrian Systems: A Case Study, Jack Dorman and Michael Everett, BP75:Dec 75:454
Education and Enforcement — The Sine Qua Non of the New Traffic-Mix, Larry Wuellner, BP75:Dec 75:548
Education of Bicycle Riders - How Much is Enough?, John E. Baerwald, BP75:Dec 75:545
The Energy Crisis/Bicycles/Federal Government, Nina Dougherty Rowe, BP75:Dec 75:19
Evaluation of the Maryland Bikeway Program, Paul R. Farragut, BP75:Dec 75:443
Grantspersonship Roundtable Minutes, Ira N. Pierce, BP75:Dec 75:587
A Guide for Municipalities for Bicycle Planning, Carmen W. Daecher, BP75:Dec 75:117
Impact of Air Quality on Bicyclists, Eugene E. Burr and Terry L. Miller, BP75:Dec 75:571
Issues and Answers in Bikeway System Development, Larry L. Lucero, BP75:Dec 75:54
Low-Energy Dual-Mode Transit, David M. Eggleston, Preprint No.2689, Apr 76, 12pp.
Opening Remarks — Pedestrian/Bicycle Facilities, Robert E. Cron, Jr., BP75:Dec 75:1
Pedestrian Versus Bicycle Versus Automobile — A Case Study, John M. Wright, BP75:Dec 75:172
Planning and Development of Bicycle Facilities: Implementation Planning, Walter H. Kraft and Carl M. Berkowitz, BP75:Dec 75:36
Planning Criteria for Bikeways, Vincent R. Desimone, TE3:Aug 73:609:9928
Poor Parking — Detrimental to Bicycling Growth, Artemas Ginzton, BP75:Dec 75:300
Problems in Route Selections for Variable Characteristics of Cyclists, James L. Konski, BP75:Dec 75:261
Resolutions Adopted at the Fourth National Seminar on the Planning, Design and Implementation of Bicycle and Pedestrian Facilities, Elizabeth A. Drake, BP75:Dec 75:591
The Role of the Bicycle, James J. Berryhill, BP75:Dec 75:33
Round Table Discussion on Future Conferences, Walter H. Kraft, BP75:Dec 75:585
San Diego-Coronado Bay Bridge: Bicycle Shuttle Service, Gene Pound and Alan McCuen, BP75:Dec 75:326
The Second Most Frequent Mode of Transportation, Bruce T. Caine and Robert L. Siegel, BP75:Dec 75:41
Teaching the Proper Use of Bicycle Facilities, John Forester, BP75:Dec 75:533
Tempe Bikeways — The Morning After, Elizabeth A. Drake, BP75:Dec 75:449
Walking and Biking in the Traffic Mix, Judith T. O'Connor, BP75:Dec 75:435
Whither Goest the Bikeway Boom?, Charles F. Floyd, BP75:Dec 75:471

Bicycle Safety
Bicycle Accidents in the City of Milwaukee, Zuhair Abou-Loghd, Arun Chatterjee and Kumares C. Sinha, TE2:May 76:347:12120
Bicycles and Traffic, Harold C. Munn, TE4:Nov 75:753:11729
Bikes and Malls, Harold Katner, BP75:Dec 75:4
Bikeway Hazards, Robert H. Wortman, BP75:Dec 75:320
Class I Bikeway Geometrics, Thomas H. Crawford, BP75:Dec 75:308
The Current Status of Transportation Control Plans, Gary Hawthorn, BP75:Dec 75:557
Education and Enforcement — The Sine Qua Non of the New Traffic-Mix, Larry Wuellner, BP75:Dec 75:548
Education of Bicycle Riders - How Much is Enough?, John E. Baerwald, BP75:Dec 75:545
A Guide for Municipalities for Bicycle Planning, Carmen W. Daecher, BP75:Dec 75:117
Illinois: First Steps in Bikeway Development, Jim Kashmier, BP75:Dec 75:75
Impact of Air Quality on Bicyclists, Eugene E. Burr and Terry L. Miller, BP75:Dec 75:571
Nighttime Visibility Through Retro-Reflective Materials, Robert A. Isaksen, BP75:Dec 75:426
Opening Remarks — Pedestrian/Bicycle Facilities, Robert E. Cron, Jr., BP75:Dec 75:1
Pedestrian Versus Bicycle Versus Automobile — A Case Study, John M. Wright, BP75:Dec 75:172
Poor Parking — Detrimental to Bicycling Growth, Artemas Ginzton, BP75:Dec 75:300
Report of the Roundtable on Legislation, Marie E. Birnbaum, BP75:Dec 75:590
The Role of the Bicycle, James J. Berryhill, BP75:Dec 75:33

San Diego-Coronado Bay Bridge: Bicycle Shuttle Service, Gene Pound and Alan McCuen, BP75:Dec 75:326
Teaching the Proper Use of Bicycle Facilities, John Forester, BP75:Dec 75:533
Walking and Biking in the Traffic Mix, Judith T. O'Connor, BP75:Dec 75:435
Washington Metro Access Facilities, Mark M. Akins, CE:July 75:63

Bicycle Usage
Bikes and Malls, Harold Katner, BP75:Dec 75:4
Evaluation of the Maryland Bikeway Program, Paul R. Farragut, BP75:Dec 75:443
Illinois: First Steps in Bikeway Development, Jim Kashmier, BP75:Dec 75:75
Issues and Answers in Bikeway System Development, Larry L. Lucero, BP75:Dec 75:54
Planning and Development of Bicycle Facilities: Implementation Planning, Walter H. Kraft and Carl M. Berkowitz, BP75:Dec 75:36
Resolving Conflicts Between People and Cars, Herbert S. Levinson, BP75:Dec 75:97
The Role of the Bicycle, James J. Berryhill, BP75: Dec 75:33
San Diego-Coronado Bay Bridge: Bicycle Shuttle Service, Gene Pound and Alan McCuen, BP75:Dec 75:326
The Second Most Frequent Mode of Transportation, Bruce T. Caine and Robert L. Siegel, BP75:Dec 75: 41
Teaching the Proper Use of Bicycle Facilities, John Forester, BP75:Dec 75:533
Tempe Bikeways — The Morning After, Elizabeth A. Drake, BP75:Dec 75:449
Types of Street Use in New Orleans, John F. Exnicios, BP75:Dec 75:10
Washington Metro Access Facilities, Mark M. Akins, CE:July 75:63
Whither Goest the Bikeway Boom?, Charles F. Floyd, BP75:Dec 75:471

Bids
Analysis of Dredging Projects, William B. Pearce, DIEE:Jan 76:139
Bidding Models: Truths and Comments, Michael Fuerst, CO1:Mar 76:169:11991
Formula for Markup for Profit, Marvin Gates and Amerigo Scarpa, TN: CO4:Dec 76:685:12590
Gates' Bidding Model—A Monte Carlo Experiment, Marvin Gates, CO4:Dec 76:o69:12631
Germany Constructs Steel Box Girder Landmark, Wilhelm Zellner, CE:Apr 75:61
Integrated Contracting Systems, Abraham Warszawski, CO1:Mar 75:213:11199
Is There Price Collusion in the Civil Engineering Profession?, Michael N. Goodkind, EI3:July 76: 301:12258
LOMARK: A Bidding Strategy, Richard Louis Wade and Robert B. Harris, CO1:Mar 76:197:11961
On Bidding—A Dynamic Model with One Competitor, Fletcher H. Griffis, Preprint No.2709, Apr 76, 28pp.
Public Versus Client Interests - An Ethical Dilemma for the Engineer, Terry L. Turnock, EI1:Jan 75:61: 11083
A Statement on Professional Services—Competitive Bidding, Gerald L. Devlin, EI1:Jan 75:53:11082

Bifurcations
Buckling of Cooling-Tower Shells: Bifurcation Results, Peter P. Cole, John F. Abel and David P. Billington, ST6:June 75:1205:11365

Bikeway Planning
Bike and Pedestrian Pathways, CE:Nov 75:72

Bikeways
Bicycle Facility Design Considerations: A Summary, John E. Baerwald, BP75:Dec 75:259
Bicycles and Traffic, Harold C. Munn, TE4:Nov 75: 753:11729
Bike and Pedestrian Pathways, CE:Nov 75:72
Bikeway Hazards, Robert H. Wortman, BP75:Dec 75: 320
Class 1 Bikeway Geometrics, Thomas H. Crawford, BP75:Dec 75:308
Computer Location of Bikeways, William L. Smith and Jerry S. Murphy, BP75:Dec 75:66
The Energy Crisis/Bicycles/Federal Government, Nina Dougherty Rowe, BP75:Dec 75:19
Evaluation of the Maryland Bikeway Program, Paul R. Farragut, BP75:Dec 75:443
A Guide for Municipalities for Bicycle Planning, Carmen W. Daecher, BP75:Dec 75:117
Illinois: First Steps in Bikeway Development, Jim Kashmier, BP75:Dec 75:75
Issues and Answers in Bikeway System Development, Larry L. Lucero, BP75:Dec 75:54
Peachtree City Path Experience: Conception to Implementation, Edwin R. Koons, BP75:Dec 75: 186
Planning and Development of Bicycle Facilities: Implementation Planning, Walter H. Kraft and Carl M. Berkowitz, BP75:Dec 75:36
Problems in Route Selections for Variable Characteristics of Cyclists, James L. Konski, BP75: Dec 75:261
Report of the Roundtable on Legislation, Marie E. Birnbaum, BP75:Dec 75:590
Round Table Discussion on Future Conferences, Walter H. Kraft, BP75:Dec 75:585
The Second Most Frequent Mode of Transportation, Bruce T. Caine and Robert L. Siegel, BP75:Dec 75: 41
A Survey of Class I Bikeway Pavements, Thomas H. Crawford, R. Gary Hicks, James J. Berryhill and James S. Lai, BP75:Dec 75:278
Tempe Bikeways — The Morning After, Elizabeth A. Drake, BP75:Dec 75:449
Walking and Biking in the Traffic Mix, Judith T. O'Connor, BP75:Dec 75:435
Whither Goest the Bikeway Boom?, Charles F. Floyd, BP75:Dec 75:471

Billets
University of Idaho Barrel-Arch Roof Wins Outstanding Structural Engineering Award, CE: June 76:48
The University of Idaho Stadium: A Micro-Lam Application, Sherman A. Nelson, Preprint No.2800, Sept 76, 19pp.

Binary Processors
Systematic Substructuring, Senol Utku, ST4:Apr 75: 717:11244

Bioassay
Bioassessment of the Standard Elutriate Test, Peter J. Shuba, Joe H. Carroll and Henry E. Tatem, DIEE: Jan 76:645
Effects of Temperature and Kelthane on Grass Shrimp, Siamak Khorram and Allen W. Knight, EE5:Oct 76:1Q43:12475

Bioassays
Evaluation Strategies of Metal Pollution in Oceans, Kenneth Y. Chen and R. Addis Lockwood, EE2: Apr 76:347:12023

Biochemical Oxygen Demand
Distributions of BOD and DO in Rivers and Lakes, Robert B. Banks, EE2:Apr 76:265:12028
Effects of Shock Temperature on Biological Systems, John L. Carter and William F. Barry, EE2:Apr 75: 229:11239
Modeling Sewage Treatment Plant Input BOD Data, Paul M. Berthouex, William G. Hunter, Lars C. Pallesen and Chun-Yen Shih, EE1:Feb 75:127: 11132
Quality of Irrigation Water and Surface Drainage, Johannes C. Guitjens, W. W. Miller and C. N. Mahannah, IR76:July 76:117
Role of Nitrogen in Activated Sludge Process, Yeun C. Wu, EE5:Oct 76:12454

Slime Holdup, Influent BOD, and Mass Transfer in Trickling Filters, Bernard Atkinson and John A. Howell, EE4:Aug 75:585:11505
Systematic Identification of DO-BOD Model Structure, Bruce Beck and Peter Young, EE5:Oct 76:909:12461
Two-Dimensional Mathematical Water Quality Model, Brian J. Williams and Jon B. Hinwood, EE1:Feb 76:149:11947
Yeast Plant Wastewater Treatment, Yeun C. Wu and Chiao F. Kao, EE5:Oct 76:969:12468

Bioengineering
Development of Finite Element Head Injury Model, Theodore A. Shugar and Michael G. Katona, EM3: June 75:223:11367
Structural Modeling of Human Head, Sunder H. Advani and Raymond P. Owings, EM3:June 75: 257:11386

Biographies
Giuseppe Venturoli, Pioneer in Channel Studies, Rene Chevray, HY10:Oct 76:1533:12488
Learn From Biographies of Early Engineers, Philip L. Alger, CE:Mar 75:90
William D. Henderson: Man, Engineer, Priest Minister, Nhora I. Cortes-Comerer, CE:Mar 76:63

Biological Properties
Bioassessment of the Standard Elutriate Test, Peter J. Shuba, Joe H. Carroll and Henry E. Tatem, DIEE: Jan 76:645

Biological Surveys
Slime Holdup, Influent BOD, and Mass Transfer in Trickling Filters, Bernard Atkinson and John A. Howell, EE4:Aug 75:585:11505

Biological Treatment
Design Optimization for Biological Filter Models, Harold B. Gotaas and William S. Galler, EE6:Dec 73:831:10191
Phosphorus Uptake by Biological Slimes, Alphonse E. Zanoni, EE6:Dec 76:1229:12621

Biomass
Biomass Distribution and Kinetics of Baffled Lagoons, James H. Reynolds, Stephen B. Nielson and E. Joe Middlebrooks, EE6:Dec 75:1005:11787
Impact on Marine Benthos of Waste Water Discharge, Gerald T. Orlob and Dennis A. O'Leary, Preprint No.2658, Apr 76, 25pp.
Satellite Observations of Water Quality, Graham P. Harris, Robert P. Bukata and J. Edward Bruton, TE3:Aug 76:537:12300
Yeast Plant Wastewater Treatment, Yeun C. Wu and Chiao F. Kao, EE5:Oct 76:969:12468

Biomechanics
Development of Finite Element Head Injury Model, Theodore A. Shugar and Michael G. Katona, EM3: June 75:223:11367
Structural Modeling of Human Head, Sunder H. Advani and Raymond P. Owings, EM3:June 75: 257:11386

Biomedical Engineering
Refined Stress Analysis of Human Aortic Heart Valves, Altay Cataloglu, Phillip L. Gould and Richard E. Clark, EM1:Feb 76:135:11924

Bitumens
Reducing Negative Friction with Bitumen Slip Layers, Alphonsus I. M. Claessen and Endre Horvat, GT8:Aug 74:925:10764

Bituminous Coal
Virus-Coal Sorption Interaction, Pushpavadan P. Oza and Malay Chaudhuri, EE6:Dec 76:1255:12633

Blast Loads
Elastic and Elasto-Plastic Computerized Dynamic Analysis of Frame Structures Subjected to Blast Overpressure, George S. Tseng, William Stea, Samuel Weissman, Norval Dobbs and Paul Price, ST76:Aug 76:977
Ultimate Strength Study of Two-Way Concrete Slabs, Michael S. Black, ST1:Jan 75:311:11077

Blunt Bodies
Effect of Separation Angle on Vortex Streets, John E.L. Simmons, EM5:Oct 75:649:11653

Bolted Joints
Epoxy-Repaired Bolted Timber Connections, R. Richard Avent, Leroy Z. Emkin, Robert H. Howard and Charles L. Chapman, ST4:Apr 76:821: 12061
Light-Gage Steel Bolted Connections without Washers, Ken P. Chong and Robert B. Matlock, ST7:July 75:1381:11433

Bolts
Connections for Steel Structures — History, State of Art, and Potential Developments, John W. Fisher, Preprint No.2748, Sept 76, 21pp.
Fatigue Life Extension of Riveted Connections, Harold S. Reemsnyder, ST12:Dec 75:2591:11795
High-Strength Bolted Connections Subject to Prying, Henning Agerskov, ST1:Jan 76:161:11840
High Strength Bolts Subject to Tension and Prying, R. Shankaran Nair, Peter C. Birkemoe and William H. Munse, ST2:Feb 74:351:10373

Bonding
Polymer-Concrete Passes Toughest Test, Austin H. Emery and Meyer Steinberg, CE:June 76:61
Shear-Bond Analysis of Steel-Deck-Reinforced Slabs, Max L. Porter, Carl E. Ekberg, Jr., Lowell F. Greimann and Hotten A. Elleby, ST12:Dec 76: 2255:12611

Bonding Strength
Concrete Failure Related to Constituent Properties, Rene B. Testa and Norris Stubbs, EM3:June 76: 515:12212
Pull-Out Mechanism in Steel Fiber-Reinforced Concrete, Antoine E. Naaman and Surendra P. Shah, ST8:Aug 76:1537:12313

Bored Piles
Behavior of Bored Piles in Sand, Fadlo T. Touma and Lymon C. Reese, GT7:July 74:749:10651
Behavior of Drilled Piers under Axial Loading, Lymon C. Reese, Fadlo T. Touma and Michael W. O'Neill, GT5:May 76:493:12135

Boreholes
Measurement of In Situ Strength, John H. Schmertmann, GT75:June 75:II-57

Boring
Instrumentation for Wave Induced Pore Pressures, James T. Dette, Vahan Tanal and Joseph A. Fischer, OE75:June 75:355

Bottom Sediments
Recent Techniques in Water Diversion, Fuat Senturk, WW76:Aug 76:1476

Boundary Conditions
Comparison of Boundary Integral Equation and FE Methods, Shien T. Wang and George E. Blandford, TN: ST9:Sept 76:1941:12370
End Effects in Long Curved Beam, Bellur S. Ramachandra Rao, S. Gopalacharayulu and N. B. Shukla, EM1:Feb 76:19:11920
Energy Absorbing Boundary for Anisotropic Material, Somasundaram Valliappan, Weeks White and Ian K. Lee, NMG:June 76:II-1013
Implicit Numerical Modeling of Unsteady Flows, Michael Amein and Hsiao-Ling Chu, HY6:June 75: 717:11378

On Kinematic Wave Approximation for Flood Routing, Ruh-Ming Li, Daryl B. Simons, Larry S. Shiao and Yung H. Chen, WW76:Aug 76:377

Boundary Layer
Mean Speed Profiles of Hurricane Winds, Emil Simiu, V. C. Patel and John F. Nash, EM2:Apr 76: 265:12044
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, Preprint No.2687, Apr 76, 28pp.
Resonance Phenomena Due to Turbulent Boundary Layer Excitation of Elastic Surfaces, Robert L. Ash and R. Balasubramanian, Preprint No.2726, Apr 76, 28pp.

Boundary Layer Flow
Prediction of Flow Development on Spillways, Robert J. Keller and Ashok K. Rastogi, HY9:Sept 75:1171:11581

Boundary Layer Separation
Boundary Layer Separation Concept of Settling Tanks, Yishu Chiu, EE6:Dec 74:1213:11019

Boundary Processes
Channel Flow Over Permeable Beds of Graded Spheres, Anthony F.E. Zagni and Kenneth V.H. Smith, HY2:Feb 76:207:11892

Boundary Shear
Boundary Shear in Channel with Flood Plain, Robert C. Myers and Elsayed M. Elsawy, HY7:July 75: 933:11452
Boundary Shear Stress as an Index of Hydraulic Jump Performance, Ronald E. Nece and Khalid Mahmood, WW76:Aug 76:978
Boundary Shear Stress Measurement by Preston Tube, Malcolm Hollick, TN: HY7:July 76:1053: 12228
Prediction of Wind Wave Heights, Henry T. Falvey, WW1:Feb 74:1:10324
Shear Distribution in Bends in Rectangular Channels, Dharam V. Varshney and Ramchandra J. Garde, HY8:Aug 75:1053:11513
Turbulent Structure near Smooth Boundary, Paul H. Blinco and Daryl B. Simons, EM3:June 75:241: 11372
Wall Shear Measurment in Sand-Water Mixture Flows, Oner Yucel and Walter H. Graf, HY7:July 75:947:11453

Boundary Value Problems
Analysis of Unilateral Contact Problem, Panagiotos D. Panagiotopoulos, TN: EM5:Oct 76:921:12443
Effects of Deposit Resuspension on Settling Basin, Takeichiro Takamatsu, Masaaki Naito, Sadatska Shiba and Yasuyo Ueda, EE4:Aug 74:883:10705
Floating Plate under Wind Waves and Human Response, Masanobu Shinozuka, H. M. Hwang and E. Makitani, Preprint No.2650, Apr 76, 30pp.
Mathematical Aspects of Surface Runoff, Vijay P. Singh, WW76:Aug 76:773
Shooting Models for Salinity and Coliform, Benjamin J. Olufeagba and Robert H. Flake, EE1:Feb 76:95: 11939

Box Beams
Diaphragms for Curved Box Beam Bridges, James C. Oleinik and Conrad P. Heins, ST10:Oct 75:2161: 11634
Prestressed Box Beams under Combined Loading, David W. Johnston and Paul Zia, ST7:July 75:1313: 11421
Rectangular Finite Element for Field Problems, Bruce W. Golley, EM3:June 76:431:12175

Box Girders
Buckling Strength of Multiple Stiffened Plates, Akio Hasegawa, Koji Oto and Fumio Nishino, ST76:Aug 76:937
Dynamic Behavior of Box-Girder Jetties, Trevor J. Poskitt, WW2:May 75:181:11310
Elastic Analysis of Rectangular Box Girders by Finite Element Method, Cetin Yilmaz and Ben T. Yen, ST76:Aug 76:1023
Irregular Supports and Skew Diaphragms of Box Girders, Vladimir Kristek, ST5:May 74:917:10541
Open Steel Box Sections with Top Lateral Bracing, Robert E. McDonald, Yeou-San Chen, Cetin Yilmaz and Ben T. Yen, ST1:Jan 76:35:11850
Shear Lag in Shallow Wide-Flanged Box Girders, Karl Van Dalen and Sanivarapu V. Narasimham, ST10:Oct 76:1969:12449
Steel Box-Girder Bridges—Ultimate Strength Considerations, Charles G. Culver, Chmn., ST12: Dec 74:2433:11014

Bracing
Axial Hysteretic Behavior of Steel Members, Addison B. Higginbotham and Robert D. Hanson, ST7:July 76:1365:12245
Design of Diaphragm-Braced I-Beams, David A. Nethercot and Nicholas S. Trahair, ST10:Oct 75: 2045:11615
Design of I-Shaped Columns with Diaphragm Bracing, Samuel J. Errera and Tamirisa V.S.R. Apparao, ST9:Sept 76:1685:12397
Diaphragm Braced Members and Design of Wall Studs, Amir Simaan and Teoman B. Pekoz, ST1:Jan 76:77:11851
Inelastic Cyclic Response of Split K-Braced Frames, Movses J. Kaldjian, Preprint No.2788, Sept 76, 15pp.
Lessons Learned in Finite Element Analyses of Temporary Excavations in Soft Clay, G. Wayne Clough and Abdulaziz I. Mana, NMG:June 76:I-496
Open Steel Box Sections with Top Lateral Bracing, Robert E. McDonald, Yeou-San Chen, Cetin Yilmaz and Ben T. Yen, ST1:Jan 76:35:11850
Rigid and Flexible Bracing Systems on Adjacent Sites, Richard G. Tait and Henry T. Taylor, CO2: June 75:365:11376
Seismic Supports for Electrical Cable Systems, Anil K. Kar and Sitansu S. Sinha, PO1:July 75:95:11464

Brain Damage
Structural Modeling of Human Head, Sunder H. Advani and Raymond P. Owings, EM3:June 75: 257:11386

Branches
Economic Pipe Sizing for Gravity Sprinkler Systems, Roland P. Perold, IR2:June 74:107:10583

Brazil
Rio-Niteroi Bridge Features Record Girder Span, Gerald F. Fox and H. James Graham, CE:Apr 76: 86

Breakeven Point
Economic Pipe Sizing in Pumped Irrigation Systems, Roland P. Perold, IR4:Dec 74:425:10988

Breaking
Currents and Sand Transport on Beaches: A Review, Paul D. Komar, Preprint No.2707, Apr 76, 27pp.
The Effect of Wave Breaking on the Statistical Distribution of Wave Heights, Ching Ton Kuo, ASCE:June 75:1211
Probability Analysis of Deep Water Breaking Waves, John H. Nath and Fred L. Ramsey, Preprint No.2691, Apr 76, 10pp.

Breakwaters
Breakwater Back Slope Stability, James R. Walker, Robert Q. Palmer and James W. Dunham, OE75: June 75:879
Consolidation Settlement of a Layered Subsurface, Surendra K. Saxena, Chandrakant S. Desai and Jayant Vir, NMG:June 76:II-1082
Effect of Structures on Irregular Waves Compared to Regular Waves, Yvon Ouellet and Yvon Morin, WW3:Aug 75:231:11494

Experience with the Offset Surfaces Breakwater, E. Douglas Sethness, Jr., Walter L. Moore and James E. Dailey, OE75:June 75:677
Field Performance of Permeable Breakwater, John C. Ludwick, Peter Fleischer, Ronald E. Johnson and Gerald L. Shideler, WW4:Nov 75:357:11703
In-Situ Undrained Shear Strength of Two Marine Clays, Demetrious Koutsoftas and Joseph A. Fischer, GT9:Sept 76:989:12431
Parameters Affecting Stability of Rubble Mounds, Per Moller Bruun and Palmi Johannesson, WW2: May 76:141:12136
Partial Wave Damping in Pneumatic Breakwaters, Iver Brevik, HY9:Sept 76:1167:12374
Porous Breakwater for Circulation Study of Harbors, G. Mavrigian and Simsek Sarikelle, OE75:June 75: 668
Simulation of Shoreline and Nearshore Currents, Tamio Sasaki, OE75:June 75:179
Volume and Strength of a Dolos, Harshkumar C. Desai, WW1:Feb 76:79:11928

Brick Masonry
Failure Hypothesis for Masonry Shear Walls, Felix Y. Yokel and S. George Fattal, ST3:Mar 76:515: 11992
Metal Ties and Anchors for Brick Walls, Clayford T. Grimm, ST4:Apr 76:839:12067

Bricks
Design for Differential Movement in Brick Walls, Clayford T. Grimm, ST11:Nov 75:2385:11739
Strength and Related Properties of Brick Masonry, Clayford T. Grimm, ST1:Jan 75:217:11066

Bridge Abutments
Full-Scale Lateral Load Tests of Pile Groups, Jai B. Kim and Robert J. Brungraber, GT1:Jan 76:87: 11849

Bridge Construction
Bridge Construction Surveying, Ray W. Burgan, Jr., CO2:June 74:105:10602
Falsework Eliminated in Bridge Erection, Gene K. Hallock, CE:Nov 76:58
Fifty-Year Development — Construction of Steel Truss Bridges, Lawrence N. Bigelow, CO2:June 75: 239:11381
Fifty-Year Development: Construction of Steel Arch Bridges, William F. Hollingsworth, CO1:Mar 75:85: 11187
Germany Constructs Steel Box Girder Landmark, Wilhelm Zellner, CE:Apr 75:61
A History of Bureau of Reclamation Construction-Part II, Harold G. Arthur, CO1:Mar 75:69:11190
News in Bridge Decks, Kneeland A. Godfrey, Jr., CE:Aug 75:60
Preassembled Steel Space Frame Bridge, Michael M. Sprinkel and David Morris, TN: CO3:Sept 76:561: 12371
Time-Dependent Stresses in Continuous Precast Bridges, Walter H. Dilger and Amin Ghali, CO1: Mar 76:239:11964

Bridge Decks
Landmark Erie Canal Structure Rehabilitated, Lawrence H. Lehman, Bertram Shapiro and Robert J. Trapani, CE:Oct 76:62
Salt Damaged Bridge Decks: Cathodic Helps, Virginia Fairweather, CE:Sept 75:88

Bridge Design
Design Considerations in Long Span Steel Bridges, Chris S.C. Yiu and Man-Chung Tang, Preprint No.2785, Sept 76, 30pp.
Examples of Computer Usage in Bridge Design, Robert J. Cope and John H. Bungey, ST4:Apr 75: 779:11230
Field Measurements and Load Spectra of Highway Bridges, Conrad P. Heins, ST76:Aug 76:133
Germany Constructs Steel Box Girder Landmark, Wilhelm Zellner, CE:Apr 75:61
Guide Criteria to Bridge and Permit Loads, David J. Chang, ST76:Aug 76:170
How Almost Anyone Can Design a Good Looking Bridge in One Easy Lesson, William Zuk, ST76: Aug 76:19
Laminated Timber Logging Bridges in British Columbia, Richard G. Scarisbrick, ST1:Jan 76:19: 11832
News in Bridge Decks, Kneeland A. Godfrey, Jr., CE:Aug 75:60
Shear Lag in Shallow Wide-Flanged Box Girders, Karl Van Dalen and Sanivarapu V. Narasimham, ST10:Oct 76:1969:12449
Stress Ribbon Bridge in Freiburg, Germany, Man-Chung Tang, CE:May 76:75

Bridge Failure
Civil Engineering History Gives Valuable Lessons, Sara Ruth Watson, CE:May 75:48
Steel Box-Girder Bridges—Ultimate Strength Considerations, Charles G. Culver, Chmn., ST12: Dec 74:2433:11014

Bridge Foundations
Full-Scale Lateral Load Tests of Pile Groups, Jai B. Kim and Robert J. Brungraber, GT1:Jan 76:87: 11849

Bridge Maintenance
Evergreen Point Bridge Maintenance Problems, Colin B. Brown, D. R. Christensen and G. F. Demich, ST76:Aug 76:189

Bridges
Model Studies of Multicell Curved Box-Girder Bridges, Mohammad Aslam and William G. Godden, EM3:June 75:207:11366
Pipeline Bridge Uses Timber Arches, Charles Gary Peterson, CE:Feb 75:58
Some Historic Bridges of the United States, Sara Ruth Watson, EI3:July 75:383:11425

Bridges (Anchorages)
Los Angeles Pioneers Separate Busway, Richard C. Gallagher, CE:Jan 75:64

Bridges (Arch)
Art in Engineering - The Need for a New Criticism, David P. Billington, PP4:Oct 73:499:10102
Bibliography on Timber Highway Bridge Design, Thomas G. Williamson, Chmn., ST1:Jan 75:1:11042
Fifty-Year Advancement in Concrete Bridge Construction, Tung. Y. Lin and Felix Kulka, CO3: Sept 75:491:11558
Fifty-Year Development: Construction of Steel Arch Bridges, William F. Hollingsworth, CO1:Mar 75:85: 11187
Least-Weight Frameworks for Loads Across Span, Richard E. McConnel, EM5:Oct 74:885:10872
Pipeline Bridge Uses Timber Arches, Charles Gary Peterson, CE:Feb 75:58
Short Span Bridges, Kneeland A. Godfrey, Jr., CE: July 75:42
The Turn From Masonry: A Study of Arch Bridges in Reinforced Concrete, David P. Billington, Preprint No.2819, Sept 76, 30pp.

Bridges (Box Girder)
Diaphragms for Curved Box Beam Bridges, James C. Oleinik and Conrad P. Heins, ST10:Oct 75:2161: 11634
Dynamic Analysis of Curved Box-Girder Bridges, Rahmat Ollah Rabizadeh and Sidney Shore, ST9: Sept 75:1899:11561
First Bridge Across the Yukon River, Lawrence Carlson, Roy C.J. Dreyer and Rodney Platzke, CE: Aug 76:47
Germany Constructs Steel Box Girder Landmark, Wilhelm Zellner, CE:Apr 75:61
Model Studies of Multicell Curved Box-Girder Bridges, Mohammad Aslam and William G. Godden, EM3:June 75:207:11366
Model Study of Horizontally Curved Box Girder, Adel R.M. Fam and Carl J. Turkstra, ST5:May 76: 1097:12151

Rio-Niteroi Bridge Features Record Girder Span, Gerald F. Fox and H. James Graham, CE:Apr 76: 86
Shear Lag in Shallow Wide-Flanged Box Girders, Karl Van Dalen and Sanivarapu V. Narasimham, ST10:Oct 76:1969:12449
Short Span Bridges, Kneeland A. Godfrey, Jr., CE: July 75:42
Steel Box-Girder Bridges—Ultimate Strength Considerations, Charles G. Culver, Chmn., ST12: Dec 74:2433:11014
Strength of Steel Box-Girder Bridges, Patrick J. Dowling, ST9:Sept 75:1929:11550

Bridges (Cable-Stayed)
Analysis of Cable-Stiffened Space Structures, Nicholas F. Morris, ST3:Mar 76:501:11998
Buckling of Cable-Stayed Girder Bridges, Man-Chung Tang, ST9:Sept 76:1675:12391
Cable-Stayed Versus Classical Suspension Bridge, Walter Podolny, Jr., TE2:May 76:291:12130
"Construction and Design of Cable-Stayed Bridges," by Walter Podolny, Jr. and John B. Scalzi (Book Review), Charles Seim, CE:Oct 76:34
Laminated Timber Logging Bridges in British Columbia, Richard G. Scarisbrick, ST1:Jan 76:19: 11832
Multispan Stayed Girder Bridges, Niels J. Gimsing, ST10:Oct 76:1989:12470
Recent Aerodynamic Studies of Long-Span Bridges, Richard H. Gade, Harold R. Bosch and Walter Podolny, Jr., ST7:July 76:1299:12233

Bridges (Cantilever)
Fifty-Year Advancement in Concrete Bridge Construction, Tung. Y. Lin and Felix Kulka, CO3: Sept 75:491:11558
World's Third Longest Cantilever Bridge, Ichiro Konishi, CE:Feb 76:84

Bridges (Concrete)
Computer Analysis of Segmentally Erected Bridges, Robert C. Brown, Jr. and Ned H. Burns, ST4:Apr 75:761:11218
Concrete Applications in Transportation Construction (1891-1976), Gordon K. Ray, Preprint No.2745, Sept 76, 29pp.
Displacements and Losses in Multistage Prestressed Members, Amin Ghali, Romy G. Sisodiya and Gamil S. Tadros, ST11:Nov 74:2307:10968
Enclosed Soak System for Deep Polymer Impregnation of Concrete Bridge Decks, Paul R. Blankenhorn, Richard E. Weyers, Donald E. Kline and Philip D. Cady, TE1:Feb 75:65:11102
Examples of Computer Usage in Bridge Design, Robert J. Cope and John H. Bungey, ST4:Apr 75: 779:11230
Falsework Eliminated in Bridge Erection, Gene K. Hallock, CE:Nov 76:58
Fifty-Year Advancement in Concrete Bridge Construction, Tung. Y. Lin and Felix Kulka, CO3: Sept 75:491:11558
Los Angeles Pioneers Separate Busway, Richard C. Gallagher, CE:Jan 75:64
Model Studies of Multicell Curved Box-Girder Bridges, Mohammad Aslam and William G. Godden, EM3:June 75:207:11366
Model Study of New Standard Prestressed Concrete Bridge, Barrington deV. Batchelor, T. Ivan Campbell, Douglas W. McEwen and Paul Csagoly, ST9:Sept 76:1789:12417
News in Bridge Decks, Kneeland A. Godfrey, Jr., CE:Aug 75:60
Post-Tensioned Slab Bridges on Isolated Supports, Roger Green, ST1:Jan 75:233:11065
Prestressed Concrete Bridges, Brice F. Bender, Preprint No.2742, Sept 76, 20pp.
Segmental Bridges in Oregon, Louis F. Pierce, TE4: Nov 76:673:12548
Shear Strength of Two-Way Bridge Slabs, Barrington deV. Batchelor and Ian R. Tissington, ST12:Dec 76:2315:12604
Time-Dependent Stresses in Continuous Precast Bridges, Walter H. Dilger and Amin Ghali, CO1: Mar 76:239:11964

Bridges (Decking)
Aerodynamic Investigations of In-Line Slender Towers for Heavy Water Plants, K. R. Cooper, H. P.A.H. Irwin and R. L. Wardlaw, ST76:Aug 76:286
Bending of Skew Orthotropic Plate Structures, John B. Kennedy and Davalath S.R. Gupta, ST8:Aug 76: 1559:12302
Enclosed Soak System for Deep Polymer Impregnation of Concrete Bridge Decks, Paul R. Blankenhorn, Richard E. Weyers, Donald E. Kline and Philip D. Cady, TE1:Feb 75:65:11102
News in Bridge Decks, Kneeland A. Godfrey, Jr., CE:Aug 75:60
Salt Damaged Bridge Decks: Cathodic Helps, Virginia Fairweather, CE:Sept 75:88
Short Span Bridges, Kneeland A. Godfrey, Jr., CE: July 75:42

Bridges (Girder)
Commentary on Orthotropic-Deck Bridge Specifications, Charles G. Schilling, Chmn., ST1:Jan 74:109:10273
Fifty-Year Development Construction of Steel Girder Bridges, Edward A. Burroughs, CO3:Sept 75:463:11549
Fracture Sensitivity of Dynamically Loaded Girders, Donald S. Mansell and Peter Dobos, ST12:Dec 75: 2523:11754
Los Angeles Pioneers Separate Busway, Richard C. Gallagher, CE:Jan 75:64
Multispan Stayed Girder Bridges, Niels J. Gimsing, ST10:Oct 76:1989:12470
Prestressed Composite Continuous Bridge Girder, Subhash C. Anand and Clarence J. Fennell, III, TN: ST1:Jan 76:313:11821
Skew and Elevated Support Effects on Curved Bridges, Donald W. Funkhouser and Conrad P. Heins, ST7:July 74:1379:10670
Theoretical Analysis of Curved Girder Bridges, Terry R. Douglas and Samuel C. Gambrell, Jr., EM5:Oct 74:991:10871

Bridges (Highway)
Bibliography on Timber Highway Bridge Design, Thomas G. Williamson, Chmn., ST1:Jan 75:1:11042
Enclosed Soak System for Deep Polymer Impregnation of Concrete Bridge Decks, Paul R. Blankenhorn, Richard E. Weyers, Donald E. Kline and Philip D. Cady, TE1:Feb 75:65:11102
Field Measurements and Load Spectra of Highway Bridges, Conrad P. Heins, ST76:Aug 76:133
Interstate Squeezes through River Gorge, CE:June 75:54
Polymer-Impregnated Concrete: Field Studies, Harshavardhan C. Mehta, John A. Manson, Wai F. Chen and John W. Vanderhoff, TE1:Feb 75:1: 11103
Service Load and Fatigue Tests on Truss Bridges, Hotten A. Elleby, Wallace W. Sanders, Jr., F. Wayne Klaiber and M. Douglas Reeves, ST12:Dec 76:2285:12625

Bridges (Lift)
Fifty-Year History of Movable Bridge Construction - Part I, Egbert R. Hardesty, Henry W. Fischer and Richard W. Christie, CO3:Sept 75:511:11565
Fifty-Year History of Movable Bridge Construction— Part III, Reece H. Wengenroth, Howard A. Mix and Egbert R. Hardesty, CO3:Sept 75:545:11555

Bridges (Movable)
Fifty-Year History of Movable Bridge Construction - Part I, Egbert R. Hardesty, Henry W. Fischer and Richard W. Christie, CO3:Sept 75:511:11565
Fifty-Year History of Movable Bridge Construction- Part II, Egbert R. Hardesty, Henry W. Fischer and Richard W. Christie, CO3:Sept 75:529:11594
Fifty-Year History of Movable Bridge Construction— Part III, Reece H. Wengenroth, Howard A. Mix and Egbert R. Hardesty, CO3:Sept 75:545:11555

Bridges (Orthotropic)
Bending of Skew Orthotropic Plate Structures, John B. Kennedy and Davalath S.R. Gupta, ST8:Aug 76: 1559:12302
Commentary on Orthotropic-Deck Bridge Specifications, Charles G. Schilling, Chmn., ST1:Jan 74:109:10273

Bridges (Piers)
Hydrodynamic Forces on Multiple Circular Cylinders, Tokuo Yamamoto, HY9:Sept 76:1193: 12395
Lateral Load-Deflection Prediction for Pile Groups, Harry G. Poulos, GT1:Jan 75:19:11061
Tests of Scour Protection for Bridge Piers, Chesley J. Posey, HY12:Dec 74:1773:11017

Bridges (Railroad)
American Wooden Bridges, Neal FitzSimons, Chmn., AWB:76, 176pp.
Rating and Reliability of Railway Bridges, William G. Byers, ST76:Aug 76:153
Stress Cycles for Fatigue Design of Railroad Bridges, Roman Wolchuk and Ronald M. Mayrbaurl, ST1: Jan 76:203:11857

Bridges (Spans)
Design Considerations in Long Span Steel Bridges, Chris S.C. Yiu and Man-Chung Tang, Preprint No.2785, Sept 76, 30pp.
News in Bridge Decks, Kneeland A. Godfrey, Jr., CE:Aug 75:60
Short Span Bridges, Kneeland A. Godfrey, Jr., CE: July 75:42

Bridges (Steel)
Design Considerations in Long Span Steel Bridges, Chris S.C. Yiu and Man-Chung Tang, Preprint No.2785, Sept 76, 30pp.
Fatigue and Fracture of Bridge Steels, Richard Roberts and George R. Irwin, ST2:Feb 76:337: 11913
Fifty-Year Development: Construction of Steel Hybrid Bridges, Ralph F. Trepal, CO4:Dec 75:719: 11765
First Bridge Across the Yukon River, Lawrence Carlson, Roy C.J. Dreyer and Rodney Platzke, CE: Aug 76:47
Germany Constructs Steel Box Girder Landmark, Wilhelm Zellner, CE:Apr 75:61
Hardinge Bridge Span Repair, Amitabha Ghosal, Jagadish C. Ganguly, Himangsu K. Banerjee and Mahesh P. Kapoor, CO4:Dec 74:631:11034
History of the Theory of Bridge Structures, Bogdan O. Kuzmanovic, Preprint No.2738, Sept 76, 32pp.
Most Beautiful Bridges Named by AISC, CE:Sept 76: 17
Preassembled Steel Space Frame Bridge, Michael M. Sprinkel and David Morris, TN: CO3:Sept 76:561: 12371
Short Span Bridges, Kneeland A. Godfrey, Jr., CE: July 75:42
Steel Box-Girder Bridges—Ultimate Strength Considerations, Charles G. Culver, Chmn., ST12: Dec 74:2433:11014
Strength of Steel Box-Girder Bridges, Patrick J. Dowling, ST9:Sept 75:1929:11550
Stress Cycles for Fatigue Design of Railroad Bridges, Roman Wolchuk and Ronald M. Mayrbaurl, ST1: Jan 76:203:11857

Bridges (Structures)
American Wooden Bridges, Neal FitzSimons, Chmn., AWB:76, 176pp.
Analysis of Cable-Stiffened Space Structures, Nicholas F. Morris, ST3:Mar 76:501:11998
Analysis of Fatigue of Welded Crane Runway Girders, David A. Demo and John W. Fisher, ST5: May 76:919:12106
Art in Engineering - The Need for a New Criticism, David P. Billington, PP4:Oct 73:499:10102
Bending of Skew Orthotropic Plate Structures, John B. Kennedy and Davalath S.R. Gupta, ST8:Aug 76: 1559:12302
Bibliography on Timber Highway Bridge Design, Thomas G. Williamson, Chmn., ST1:Jan 75:1:11042
Bridge Construction Surveying, Ray W. Burgan, Jr., CO2:June 74:105:10602
Buckling of Cable-Stayed Girder Bridges, Man-Chung Tang, ST9:Sept 76:1675:12391
California's Seismic Design Criteria for Bridges, James H. Gates, ST12:Dec 76:2301:12636
Case Study of Burr Truss Covered Bridge, Emory L. Kemp and John Hall, EI3:July 75:391:11461
Civil Engineering History Gives Valuable Lessons, Sara Ruth Watson, CE:May 75:48
Coefficients to Analyze Rectangular Slab Bridges, Iman Hossain, ST1:Jan 75:151:11048
Commentary on Orthotropic-Deck Bridge Specifications, Charles G. Schilling, Chmn., ST1:Jan 74:109:10273
Design Considerations in Long Span Steel Bridges, Chris S.C. Yiu and Man-Chung Tang, Preprint No.2785, Sept 76, 30pp.
Displacements and Losses in Multistage Prestressed Members, Amin Ghali, Romy G. Sisodiya and Gamil S. Tadros, ST11:Nov 74:2307:10968
Early Developments in American Concrete, Russell S. Fling, Preprint No.2791, Sept 76, 24pp.
Effective Composite Beam Width at Ultimate Load, Conrad P. Heins and Horn Ming Fan, ST11:Nov 76:2163:12538
Elements of Steel Structures — History, State-of-the-Art, and Potential Developments: Columns, Reidar Bjorhovde, Preprint No.2786, Sept 76, 24pp.
Evergreen Point Bridge Maintenance Problems, Colin B. Brown, D. R. Christensen and G. F. Demich, ST76:Aug 76:189
Experimental Bridge Girder of Reinforced Plastic, Fred C. McCormick, TE1:Feb 75:47:11104
Fatigue and Fracture of Bridge Steels, Richard Roberts and George R. Irwin, ST2:Feb 76:337: 11913
Fatigue Provisions of AASHTO Specifications, Kadir M. Kusmez and Chi C. Tung, ST9:Sept 76:1725: 12385
Fifty-Year Advancement in Concrete Bridge Construction, Tung. Y. Lin and Felix Kulka, CO3: Sept 75:491:11558
Fifty-Year Development — Construction of Steel Truss Bridges, Lawrence N. Bigelow, CO2:June 75: 239:11381
Fifty-Year Development — Construction of Steel Pipeline Suspension Bridges, John F. Cain, CO4: Dec 75:733:11768
Fifty-Year Development: Construction of Steel Arch Bridges, William F. Hollingsworth, CO1:Mar 75:85: 11187
Fifty-Year Development Construction of Steel Girder Bridges, Edward A. Burroughs, CO3:Sept 75:463:11549
Fifty-Year Development: Construction of Steel Hybrid Bridges, Ralph F. Trepal, CO4:Dec 75:719: 11765
Fifty-Year History of Movable Bridge Construction - Part I, Egbert R. Hardesty, Henry W. Fischer and Richard W. Christie, CO3:Sept 75:511:11565
Fifty-Year History of Movable Bridge Construction— Part III, Reece H. Wengenroth, Howard A. Mix and Egbert R. Hardesty, CO3:Sept 75:545:11555
Fracture Sensitivity of Dynamically Loaded Girders, Donald S. Mansell and Peter Dobos, ST12:Dec 75: 2523:11754
History of the Theory of Bridge Structures, Bogdan O. Kuzmanovic, Preprint No.2738, Sept 76, 32pp.
How Almost Anyone Can Design a Good Looking Bridge in One Easy Lesson, William Zuk, ST76: Aug 76:19
Load Factor Analysis of Design of Bridges, James C. Porter, ST5:May 76:891:12098
Load Factor Design of Continuous-Span Bridges, Conrad P. Heins and Alan D. Kurzweil, ST6:June 76:1213:12219
Los Angeles Pioneers Separate Busway, Richard C. Gallagher, CE:Jan 75:64

Low-Temperature Tests of Simulated Bridge Members, Charles G. Schilling, Karl H. Klippstein, John M. Barsom, Stephan R. Novak and Gilbert T. Blake, ST1:Jan 75:31:11049
Maintenance of Services during Construction, Claude Cossette and Ernest Zbinden, CO1:Mar 75:155:11186
Minimum Cost Design of Elevated Transit Structures, Antoine E. Naaman and Marshall L. Silver, CO1:Mar 76:99:11986
Pavement Applications for Steel Fibrous Concrete, David R. Lankard and Alvin J. Walker, TE1:Feb 75:137:11108
Photoelastic Model of Bridge Cross-Frame Junction, Alex S. Redner and Leonard Pompa, EM4:Aug 76:659:12347
Pipeline Bridge Uses Timber Arches, Charles Gary Peterson, CE:Feb 75:58
Polymer-Impregnated Concrete: Field Studies, Harshavardhan C. Mehta, John A. Manson, Wai F. Chen and John W. Vanderhoff, TE1:Feb 75:1:11103
Polymer-Impregnated Concrete: Laboratory Studies, Einar Dahl-Jorgensen, Wai F. Chen, John A. Manson, Yu-Nan Liu and John W. Vanderhoff, TE1:Feb 75:29:11101
The Seismic Design of the Dumbarton Bridge, Charles Seim, Preprint No.2811, Sept 76, 25pp.
Some Esthetic Considerations in Steel Design, Thomas C. Kavanagh, ST11:Nov 75:2257:11718
State-of-the-Art Report on Ultimate Strength of I-Beam Bridge Systems, Conrad P. Heins, Chmn., ST5:May 75:1085:11323
Steel Orthotropic Plates under Alternate Loads, Giulio Ceradini, Carlo Gavarini and Mario P. Petrangeli, ST10:Oct 75:2015:11618
Survival in the Legal Jungle, Frederick J. Richards, Jr., Preprint No.2761, Sept 76, 4pp.
Theoretical Analysis of Curved Girder Bridges, Terry R. Douglas and Samuel C. Gambrell, Jr., EM5:Oct 74:991:10871
Thermal Calculations for Bridge Design, Bruce W. Hunt and Nigel Cooke, ST9:Sept 75:1763:11545
The Turn From Masonry: A Study of Arch Bridges in Reinforced Concrete, David P. Billington, Preprint No.2819, Sept 76, 30pp.
Ultimate Live Load Distribution Factor for Bridges, Conrad P. Heins and John T.C. Kuo, ST7:July 75:1481:11443
Ultimate Load Test of Truss Bridge Floor System, Wallace W. Sanders, Jr., F. Wayne Klaiber, Hotten A. Elleby and Leonard W. Timm, ST7:July 76:1383:12247
Viaducts—A Case Study, Rowland Richards, Jr. and David G. Elms, EI4:Oct 74:293:10845

Bridges (Suspension)

America's Greatest Suspension Bridges, CE:July 76:78
Analysis of Cable-Stiffened Space Structures, Nicholas F. Morris, ST3:Mar 76:501:11998
Binary Flutter of Suspension Bridge Deck Sections, Yasuharu Nakamura and Takeshi Yoshimura, EM4:Aug 76:685:12327
Cable-Stayed Versus Classical Suspension Bridge, Walter Podolny, Jr., TE2:May 76:291:12130
Effects of Turbulence on Bridge Model Torsional Stability, Timothy A. Reinhold, Henry W. Tieleman and Francis J. Maher, ST5:May 76:1003:12118
Fifty-Year Advancement in Concrete Bridge Construction, Tung. Y. Lin and Felix Kulka, CO3:Sept 75:491:11558
Fifty-Year Development — Construction of Steel Pipeline Suspension Bridges, John F. Cain, CO4:Dec 75:733:11768
Fifty-Year Development: Construction of Steel Suspension Bridges, James D. Dwyer, CO1:Mar 75:105:11176
Maintenance of Services during Construction, Claude Cossette and Ernest Zbinden, CO1:Mar 75:155:11186
O.H. Ammann: A View from the Bridge, CE:July 76:77
Recent Aerodynamic Studies of Long-Span Bridges, Richard H. Gade, Harold R. Bosch and Walter Podolny, Jr., ST7:July 76:1299:12233
Steel Stress-Ribbon Concept — Will It Save Money?, Robert J. Wheen, CE:May 76:74
Stress Ribbon Bridge in Freiburg, Germany, Man-Chung Tang, CE:May 76:75
Wake Study of Stiffening Truss and Box Girder, Timothy A. Reinhold, Henry W. Tieleman and Francis J. Maher, ST9:Sept 76:1643:12372

Bridges (Truss)

Fatigue Life Extension of Riveted Connections, Harold S. Reemsnyder, ST12:Dec 75:2591:11795
Fifty-Year Advancement in Concrete Bridge Construction, Tung. Y. Lin and Felix Kulka, CO3:Sept 75:491:11558
Fifty-Year Development — Construction of Steel Truss Bridges, Lawrence N. Bigelow, CO2:June 75:239:11381
Hardinge Bridge Span Repair, Amitabha Ghosal, Jagadish C. Ganguly, Himangsu K. Banerjee and Mahesh P. Kapoor, CO4:Dec 74:631:11034
Service Load and Fatigue Tests on Truss Bridges, Hotten A. Elleby, Wallace W. Sanders, Jr., F. Wayne Klaiber and M. Douglas Reeves, ST12:Dec 76:2285:12625
Ultimate Load Test of Truss Bridge Floor System, Wallace W. Sanders, Jr., F. Wayne Klaiber, Hotten A. Elleby and Leonard W. Timm, ST7:July 76:1383:12247
World's Third Longest Cantilever Bridge, Ichiro Konishi, CE:Feb 76:84

Bridges (Wooden)

American Wooden Bridges, Neal FitzSimons, Chmn., AWB:76, 176pp.
Analysis and Design of Griplam Nailed Connections, Ricardo O. Foschi and Jack Longworth, ST12:Dec 75:2537:11766
Bibliography on Timber Highway Bridge Design, Thomas G. Williamson, Chmn., ST1:Jan 75:1:11042
Case Study of Burr Truss Covered Bridge, Emory L. Kemp and John Hall, EI3:July 75:391:11461
Laminated Timber Logging Bridges in British Columbia, Richard G. Scarisbrick, ST1:Jan 76:19:11832
Pipeline Bridge Uses Timber Arches, Charles Gary Peterson, CE:Feb 75:58
Short Span Bridges, Kneeland A. Godfrey, Jr., CE:July 75:42

Bridge Tests

Guide Criteria to Bridge and Permit Loads, David J. Chang, ST76:Aug 76:170
Service Load and Fatigue Tests on Truss Bridges, Hotten A. Elleby, Wallace W. Sanders, Jr., F. Wayne Klaiber and M. Douglas Reeves, ST12:Dec 76:2285:12625

Brittle Fractures

First Bridge Across the Yukon River, Lawrence Carlson, Roy C.J. Dreyer and Rodney Platzke, CE:Aug 76:47

Brittleness

Dual Failure Criterion for Plain Concrete, Han-Chin Wu, EM6:Dec 74:1167:10996
Stress and Stability Analyses of Underground Openings Taking Post-Failure Behavior of Rock into Consideration, T. Kawamoto and T. Saito, NMG:June 76:II-791

Broad-Crested Weirs

Brink Depth for Trapezoidal Broad-Crested Weir, Birendra N. Neogy, HY12:Dec 72:2171:9427
Highway Fill — A Broad-Crested Weir, Beverly M. Johnson, CE:Oct 76:60

Bubbles

Water to Air Bacterial Transfer by Bursting Bubbles, D. Wozniak, M. Kiwak, C. Cahoon and Robert H. Edgerton, EE3:June 76:567:12197

Buckling
Accuracy of Some Numerical Methods for Column Buckling, Paul Seide, EM5:Oct 75:549:11607
Analysis of Lateral Buckling in Plane Frames, Porpan Vacharajittiphan and Nicholas S. Trahair, ST7:July 75:1497:11430
Axial Compression of Formed-Faced Sandwich Panels, Ken P. Chong, Pei-Chung Liu and Kjell Oistein Engen, Preprint No.2807, Sept 76, 22pp.
Axial Hysteretic Behavior of Steel Members, Addison B. Higginbotham and Robert D. Hanson, ST7:July 76:1365:12245
Behavior of Fabricated Tubular Columns Under Biaxial Bending, Wai F. Chen and D. A. Ross, Preprint No.2659, Apr 76, 21pp.
Bending Strength of Rectangular Hallow Sections, Ray R. Ayers, James M. Nash and William J. Graff, ST76:Aug 76:439
Buckling Formulas for Corrugated Metal Shear Diaphragms, John T. Easley, ST7:July 75:1403:11429
Buckling of A Single-Crossarm Stayed Column, Raymond J. Smith, George T. McCaffrey and John S. Ellis, ST1:Jan 75:249:11071
Buckling of Axially Loaded Open Shells, Tung H. Yang and Sidney A. Guralnick, EM2:Apr 76:199:12055
Buckling of Cable-Stayed Girder Bridges, Man-Chung Tang, ST9:Sept 76:1675:12391
Buckling of Cantilever Bars on Elastic Foundations, James T.S. Wang, TN: EM4:Aug 76:731:12286
Buckling of Composite Beams in Negative Bending, Sumio Hamada and Jack Longworth, ST11:Nov 74:2205:10917
Buckling of Cooling-Tower Shells: Bifurcation Results, Peter P. Cole, John F. Abel and David P. Billington, ST6:June 75:1205:11365
Buckling of Cooling-Tower Shells: State-of-the-Art, Peter P. Cole, John F. Abel and David P. Billington, ST6:June 75:1185:11364
Buckling of Cylindrical Shells by Wind Pressure, Yung-shih Wang and David P. Billington, EM5:Oct 74:1005:10874
Buckling of Inelastic I-Beams under Moment Gradient, Sritawat Kitipornchai and Nicholas S. Trahair, ST5:May 75:991:11295
Buckling of Web Plates under Combined Loadings, Mohammed Z. Khan and Kenneth C. Johns, ST10:Oct 75:2079:11619
Buckling of Welded Hybrid Steel I-Beams, David A. Nethercot, ST3:Mar 76:461:11965
Buckling Strength of Multiple Stiffened Plates, Akio Hasegawa, Koji Oto and Fumio Nishino, ST76:Aug 76:937
Buckling Stress States of Cylindrical Shells, Ihsan Mungan, ST11:Nov 74:2289:10965
Buckling Stress States of Hyperboloidal Shells, Ihsan Mungan, ST10:Oct 76:2005:12465
The Computer in Shell Stability Analysis, Bo O. Almroth and James H. Starnes, EM6:Dec 75:873:11811
Design Applications: The SSRC Guide, Third Edition, Bruce G. Johnston, Preprint No.2802, Sept 76, 33pp.
Design Criteria for H-Columns under Biaxial Loading, Negussie Tebedge and Wai F. Chen, ST3:Mar 74:579:10400
Diaphragm Braced Members and Design of Wall Studs, Amir Simaan and Teoman B. Pekoz, ST1:Jan 76:77:11851
Discrete Field Stability Analysis of Ribbed Plates, R. Richard Avent and Dieter Bounin, ST9:Sept 76:1917:12413
Dynamic Buckling of Shallow Arches, David L.C. Lo and Ernest F. Masur, EM5:Oct 76:901:12493
Effect of Foundation Stiffness on Track Buckling, Yehia M. El-Aini, EM3:June 76:531:12216
Elastic Buckling of Arches under Symmetrical Loading, Walter J. Austin and Timothy J. Ross, ST5:May 76:1085:12149
Flexural-Torsional Buckling of Curved Members, Porpan Vacharajittiphan and Nicholas S. Trahair, ST6:June 75:1223:11350
Frame Collapse Using Tangent Stiffness, William Tranberg, Peter Swannell and John L. Meek, ST3:Mar 76:659:11979
High Rise Building Column Design, Jerome S.B. Iffland, Preprint No.2740, Sept 76, 28pp.
Inelastic Buckling of Rings with Residual Stresses, Subhash C. Anand and Alvin R. Griffith, EM5:Oct 73:927:10063
Inelastic Buckling of Simply Supported Steel I-Beams, Sritawat Kitipornchai and Nicholas S. Trahair, ST7:July 75:1333:11419
Inelastic Cycles of Axially Loaded Steel Members, Lawrence F. Kahn and Robert D. Hanson, ST5:May 76:947:12111
Inelastic Lateral Buckling of Determinate Beams, David A. Nethercot and Nicholas S. Trahair, ST4:Apr 76:701:12020
Inelastic Strength of Cold-Formed Steel Beams, H. Peter Reck, ST11:Nov 75:2193:11713
Inelastic Sway Buckling of Multistory Frames, Francois Cheong-Siat-Moy, ST1:Jan 76:65:11848
Large-Deflection Spatial Buckling of Thin Walled Beams and Frames, Zdenek P. Bazant and Mahjoub El Nimeiri, EM6:Dec 73:1259:10247
Lateral Stability of Cable Truss, H. Max Irvine and Paul C. Jennings, EM4:Aug 75:403:11519
Local and Overall Buckling of Cold-Formed Members, John T. DeWolf, Teoman B. Pekoz and George Winter, ST10:Oct 74:2017:10875
Local Buckling of Long-Span Concrete Folded Plates, Stuart E. Swartz and Vernon H. Rosebraugh, ST10:Oct 76:1981:12455
Local Buckling of Long-Span Folded Plates, Stuart E. Swartz, Vernon H. Rosebraugh and Guang-Nan Fanjiang, ST5:May 75:1097:11298
Local Buckling of Tubular Steel Columns, Alexis Ostapenko and Stephen X. Gunzelman, ST76:Aug 76:549
Lumped Parameter Circular Plate Stability Analysis, George Johnson and Walter Pilkey, TN: ST5:May 76:1135:12128
Model of Interactive Buckling of Stiffened Plates, James G.A. Croll, EM5:Oct 75:575:11622
Multistory Frame Design Using Story Stiffness Concept, Francois Cheong Siat Moy, ST6:June 76:1197:12221
Nonlinear Analysis of Reticulated Space Trusses, Dharapuram S. Jagannathan, Howard I. Epstein and Paul P. Christiano, ST12:Dec 75:2641:11799
Overall Elastic Stability of Multistory Buildings, R. Shankaran Nair, ST12:Dec 75:2487:11762
Post-Buckling of Redundant I-Beams, Scott T. Woolcock and Nicholas S. Trahair, EM2:Apr 76:293:12054
Post-Buckling of Redundant Rectangular Beams, Scott T. Woolcock and Nicholas S. Trahair, EM4:Aug 75:301:11491
Post-Local-Buckling Behavior of Continuous Beams, Shien T. Wang and Sheng S. Yeh, ST6:June 74:1169:10595
Shear Buckling of Square Perforated Plates, John F. Grosskurth, Jr., Richard N. White and Richard H. Gallagher, EM6:Dec 76:1025:12641
Space Trusses with Brittle-Type Strut Buckling, Lewis C. Schmidt, Peter R. Morgan and John A. Clarkson, ST7:July 76:1479:12274
Stability and Dynamic Analyses of Cooling Tower, Chang-hua Yeh and William Y.J. Shieh, PO2:Nov 73:339:10141
Stability of Half-Barrel Orthotropic Shells, Osman A. Marzouk and George Abdel-Sayed, ST7:July 75:1517:11441
Survival in the Legal Jungle, Frederick J. Richards, Jr., Preprint No.2761, Sept 76, 4pp.
Technique for Formulating Beam Equations, David W. Murray, EM5:Oct 75:561:11613
Test of Circular Steel Tubes in Bending, Donald R. Sherman, ST11:Nov 76:2181:12568
Ultimate Strength of Continuous Composite Beams, Sumio Hamada and Jack Longworth, ST7:July 76:1463:12267
Unstiffened Compression Elements, V. Kalyanaraman, Teoman B. Pekoz and George Winter, Preprint No.2807, Sept 76, 38pp.

Budgeting
Optimizing Capital Investments in Construction, Donn E. Hancher and David K. Gebert, CO4:Dec 76:629:12606

Budgets
Specifications—Design Professionals' Forgotten Challenge, Edward R. Fisk, CO2:June 76:303:12171

Building Design
Comparison of Three-Dimensional Analysis of Concrete Shear Wall Buildings and Their Actual Behavior, Venkataswamy Ramakrishnan, ST76:Aug 76:95
Designing for the Disadvantaged: Optimum Design Considers All Users, John J. Fruin, CE:Mar 75:65
Information Models in Building Design Process, Alan D. Russell, EI2:Apr 75:133:11217

Buildings
Ambient Response Analysis of Some Tall Structures, George T. Taoka, Michael Hogan, Fazlur R. Khan and Robert H. Scanlan, ST1:Jan 75:49:11051
Analysis of Shear Cores Using Superelements, Barry J. Goodno and James M. Gere, ST1:Jan 76:267:11837
Approximate Analysis of Multistory Multibay Frames, Paul C.K. Chan, Arthur C. Heidebrecht and Wai K. Tso, ST5:May 75:1021:11302
Automated Analysis of Standard Buildings, Norman R. Maham, ST4:Apr 75:751:11265
Bailey's Crossroads: A/E Liability Test, Virginia Fairweather, CE:Nov 75:58
Building and Operating Costs Versus Rental Income, Clayford T. Grimm, EI3:July 76:355:12270
Building Named in National Steel Contest, CE:Jan 76:12
Conservation of Energy in Buildings, Vance L. Sailor, CO3:Sept 74:295:10795
The Constructed Environment with Man as the Measure as Part of the Quality System in Construction, Cabell Gwathmey, Chmn., EFAN: Nov 74
Design Applications: The SSRC Guide, Third Edition, Bruce G. Johnston, Preprint No.2802, Sept 76, 33pp.
Design of Building Floor Systems Subjected to Steady-State Dynamic Loads, Donald W. Vannoy, Furman W. Barton and Conrad P. Heins, ST76:Aug 76:720
Design of I-Shaped Beams with Diaphragm Bracing, Samuel J. Errera and Tamirisa V.S.R. Apparao, ST4:Apr 76:769:12051
Design of I-Shaped Columns with Diaphragm Bracing, Samuel J. Errera and Tamirisa V.S.R. Apparao, ST9:Sept 76:1685:12397
Differential Settlement of Buildings, Rebecca Grant, John T. Christian and Erik H. Vanmarcke, GT9: Sept 74:973:10802
Dynamic Properties of Tall Shear-Wall Buildings, George T. Taoka, Augustine S. Furumoto and Arthur N.L. Chiu, ST2:Feb 74:305:10336
Early Developments in American Concrete, Russell S. Fling, Preprint No.2791, Sept 76, 24pp.
Earthquake Behavior of Suspended-Floor Buildings, Barry J. Goodno and James M. Gere, ST5:May 76: 973:12105
Earthquake Design of Buildings:Damping, Gary C. Hart and Ramaswami Vasudevan, ST1:Jan 75:11: 11041
Effects of Foundation Tipping on Dynamic Response, Jethro W. Meek, ST7:July 75:1297:11411
Elastic and Elasto-Plastic Computerized Dynamic Analysis of Frame Structures Subjected to Blast Overpressure, George S. Tseng, William Stea, Samuel Weissman, Norval Dobbs and Paul Price, ST76:Aug 76:977
Elastoplastic Analysis of Coupled Shear Walls, Kumarapillai K. Nayar and Alexander Coull, ST9: Sept 76:1845:12401
Elements of Steel Structures — History, State-of-the-Art, and Potential Developments: Columns, Reidar Bjorhovde, Preprint No.2786, Sept 76, 24pp.
Energy Conservation in Existing Buildings, Kneeland A. Godfrey, Jr., CE:Sept 75:79
Engineering Risk Management of Natural and Man-Made Hazards, Larry T. Lee and Jon D. Collins, Preprint No.2757, Sept 76, 30pp.
Frame Interaction in Nonorthogonal Grids, Stephen Chriss, ST4:Apr 76:739:12031
Guidance for Load Tests of Buildings, Neal FitzSimons and Anatole Longinow, ST7:July 75: 1367:11431
High Rise Building Column Design, Jerome S.B. Iffland, Preprint No.2740, Sept 76, 28pp.
Integrated System for Production of Joists, A. Murray Lount and Sidney H. Simmonds, ST4:Apr 75:807:11242
Latticed Structures: State-of-the-Art Report, Donald R. Sherman, Chmn., ST11:Nov 76:2197:12581
Linear Structural Analysis of Multistory Buildings, R. Shankaran Nair, ST3:Mar 75:551:11163
Measurements and Evaluation of Building Response to Ground Motion at Various Stages of Construction, Kenneth K. Honda, ST76:Aug 76:403
New Building Measures Needed in Order to Design for People, Calvin W. Taylor, EFAN:Dec 74:47
A New Generation of Military Hospitals, Vernon McKenzie and Roy D. Lemons, EFAN:Dec 74:108
Nonlinear Seismic Response of a Coupled Wall System, Stephen A. Mahin and Vitelmo V. Bertero, ST9:Sept 76:1759:12407
Old and New Concept of Tornadoes, T. Theodore Fujita, Preprint No.2784, Sept 76, 10pp.
Optimum Seismic Design of Linear Shear Buildings, Emilio Rosenblueth and Alejandro Asfura, ST5: May 76:1077:12119
Overall Elastic Stability of Multistory Buildings, R. Shankaran Nair, ST12:Dec 75:2487:11762
Performance Requirements for Fireproofing Materials, Lawrence G. Seigel, EM3:June 74:489: 10598
Principles of Composition in Building Art, Clayford T. Grimm, ST9:Sept 75:1739:11544
Probability of Failure of Building from Fire, Raymond H. Burros, ST9:Sept 75:1947:11567
Procedures for Evaluation of Earthquake Risk to Buildings, R. Martin Czarnecki, E. C. Wang and Sigmund A. Freeman, Preprint No.2804, Sept 76, 28pp.
Renovation and Recycling — New Life for Old Buildings, Virginia Fairweather, CE:Oct 75:69
The Safety of Structural Steel Columns, Reidar Bjorhovde, Preprint No.2809, Sept 76, 27pp.
Seasonal Effects on Building Construction, David Morris, CO1:Mar 76:29:11989
Seismic Behavior of K-Braced Framing Systems, James C. Anderson, ST10:Oct 75:2147:11636
Settlement of Building on Pile Foundation in Sand, Robert M. Koerner and Antal Partos, GT3:Mar 74: 265:10405
Simplified Analysis of Framed-Tube Structures, Alexander Coull and Bishwanath Bose, ST11:Nov 75:2223:11696
Simplified Analysis of Wall-Frame Building Structures, Carlos A. Prato, TN: ST12:Dec 76: 2353:12593
Single Element Panel for Flat Plate Structures, Sid French, Algis P. Kabaila and Victor A. Pulmano, ST9:Sept 75:1801:11553
Social and Environmental Costs in Construction, Enno Koehn, CO4:Dec 76:593:12599
Some Esthetic Considerations in Steel Design, Thomas C. Kavanagh, ST11:Nov 75:2257:11718
Strength of Beams with Eccentric Reinforced Holes, Tsong-Miin Wang, Robert R. Snell and Peter B. Cooper, ST9:Sept 75:1783:11540
Three-Dimensional Analysis of Shear Wall Buildings to Lateral Load, Jayanta K. Biswas and Wai K. Tso, ST5:May 74:1019:10537
Tornado Design Winds Based on Risk, Robert C. Garson, Jose Morla Catalan and C. Allin Cornell, ST9:Sept 75:1883:11559
Torsional Response of High-Rise Buildings, Gary C. Hart, Roger M. DiJulio, Jr. and Marshall Lew, ST2: Feb 75:397:11126

Wind Pressures on Buildings-Probability Densities, Jon A. Peterka and Jack E. Cermak, ST6:June 75: 1255:11373
8-Story Building Moved to Avoid Wrecker's Ball, Antonio Paez Restropo, CE:June 75:62

Buildings (Apartment)
Bailey's Crossroads Collapse Reviewed, Ingvar Schousboe, CO2:June 76:365:12186
Building Construction Management Game, Kenneth F. Reinschmidt, James W. Litchfield and Steven D. Hunt, EI2:Apr 75:117:11248
Hydrologic Impact of Planned Unit Developments, Richard H. McCuen and Harry W. Piper, UP1:May 75:93:11329
Seismic Design Decision Analysis, Robert V. Whitman, John M. Biggs, C. Allin Cornell, John E. Brennan, III, Richard L. de Neufville and Erik H. Vanmarcke, ST5:May 75:1067:11309

Buildings (Codes)
ACI Building Code in Decision Logic Table Format, Jimmy L. Noland and Chuan C. Feng, ST4:Apr 75: 677:11220
Adverse Wind Loading Induced by Adjacent Buildings, Jon A. Peterka and Jack E. Cermak, ST3:Mar 76:533:11980
ASCE Tackles Standards, CE:Aug 76:64
Changes in the Private Sector, David Stahl, UP1:Aug 76:25:12352
Cladding and the Wind, Keith J. Eaton, ST5:May 76: 1043:12114
The Darwin Cyclone — Valuable Lesson in Structural Design, George R. Walker, Joseph E. Minor and Richard D. Marshall, CE:Dec 75:82
Designing for the Disadvantaged: Optimum Design Considers All Users, John J. Fruin, CE:Mar 75:65
Design of Building Floor Systems Subjected to Steady-State Dynamic Loads, Donald W. Vannoy, Furman W. Barton and Conrad P. Heins, ST76:Aug 76:720
Design of Reinforced Concrete Spandrel Beams, Thomas T.C. Hsu and Kenneth T. Burton, ST1:Jan 74:209:10277
Effect of Building Regulations on Built Environment, Daniel L. Schodek, EI3:July 76:293:12261
Equivalent Static Wind Loads for Tall Building Design, Emil Simiu, ST4:Apr 76:719:12057
Flood Proofing Regulations for Building Codes, Armando C. Lardieri, HY9:Sept 75:1155:11576
Guidance for Load Tests of Buildings, Neal FitzSimons and Anatole Longinow, ST7:July 75: 1367:11431
Heating Calculation of Structural Steel Members, Bernard Barthelemy, ST8:Aug 76:1549:12303
Hi-Rise in Wood, Frank Horner, Preprint No.2798, Sept 76, 8pp.
Historical Review of Earthquakes, Damage, and Building Codes, Glen V. Berg, ST76:Aug 76:387
How Concerned Should Civil Engineers be with Fire Protection?, Virginia Fairweather, CE:Mar 75:57
Inductive Approaches to Structural Safety, Daniele Veneziano, EI1:Jan 76:81:11871
Limit Design of Folded Plate Structures, Morris N. Fialkow, ST76:Aug 76:222
Loadings and Codes for Typhoon Resistant Design, Hatsuo Ishizaki, ST10:Oct 76:2073:12496
Load Tests of Building Structures, Richard Bares and Neal FitzSimons, ST5:May 75:1111:11322
Meeting the Earthquake Challenge: California's New Laws, Karl V. Steinbrugge and Henry J. Degenkolb, CE:Feb 75:44
Method of Developing Optimum Tolerances, Emilio Rosenblueth and Alejandro Asfura, ST2:Feb 76: 323:11889
New Orleans Grows on Deep Piles, Roney A. Heinz, CE:Apr 76:73
Optimization of Long-Span Cold-Formed Truss Purlins, Richard T. Douty and James O. Crooker, ST11:Nov 74:2275:10952
Organizational Model for Design Specifications, Douglas J. Nyman and Steven J. Fenves, ST4:Apr 75:697:11227
Practical Approach to Code Calibration, Wilfred W.C. Siu, Sree R. Parimi and Niels C. Lind, ST7: July 75:1469:11404
Probability Distributions of Extreme Wind Speeds, Emil Simiu and James J. Filliben, ST9:Sept 76: 1861:12381
Seismic Behavior of K-Braced Framing Systems, James C. Anderson, ST10:Oct 75:2147:11636
Seismic Design Decision Analysis, Robert V. Whitman, John M. Biggs, C. Allin Cornell, John E. Brennan, III, Richard L. de Neufville and Erik H. Vanmarcke, ST5:May 75:1067:11309
Seismic Design of Non-Structural Building Systems, Alfred Goldberg, Preprint No.2756, Sept 76, 14pp.
Seismic Rehabilitation of Buildings With Special Importance, Daniel Shapiro, Preprint No.2787, Sept 76, 17pp.
Social Evaluation of Land-Use Controls, Morton Lustig, UP1:Aug 76:111:12356
Towards Optimum Design Through Building Codes, Emilio Rosenblueth, ST3:Mar 76:591:11999
Wind Climate and Failure Risks, Emil Simiu, ST9: Sept 76:1703:12389

Buildings (Hospitals)
Evaluation of an Existing Building Complex for Earthquake Response, Sigmund A. Freeman, ST76: Aug 76:781
A New Generation of Military Hospitals, Vernon McKenzie and Roy D. Lemons, EFAN:Dec 74:108

Buildings (Hotels)
Computer-Aided Structural Analysis and Design of the 37-Story Bonaventure Hotel, Joseph P. Nicoletti, Dilip P. Jhaveri and Leroy Z. Emkin, ST76:Aug 76:796
Rock Slopes in an Urban Environment (A Case History), David E. Pauls and James G. LaBastie, GT76:Aug 76:182
Steel Frame, Precast Floors Meet Impossible Time Constraints, Arthur B. Andersen, CE:Feb 76:54
Structural Design and Analysis of Atlanta Center, Ltd., Stephen J. Campbell and Bill L. Gunnin, ST76:Aug 76:771

Buildings (Office)
Albany South Mall: Largest State Government Complex, John C. Byron, CE:May 76:66
Building Construction Management Game, Kenneth F. Reinschmidt, James W. Litchfield and Steven D. Hunt, EI2:Apr 75:117:11248
Estimating Refuse Generation in Office Buildings, Glenn R. Harris, Stuart H. Mann and Craig R. Humphrey, TN: EE5:Oct 76:1111:12442
Live-Load Survey Results for Office Buildings, Charles G. Culver, ST12:Dec 76:2269:12615
Structural Design and Analysis of Atlanta Center, Ltd., Stephen J. Campbell and Bill L. Gunnin, ST76:Aug 76:771
Torsional Response of High-Rise Buildings, Gary C. Hart, Roger M. DiJulio, Jr. and Marshall Lew, ST2: Feb 75:397:11126
Ventura City Hall Restoration, James Warner, CO1: Mar 76:119:11970
9000 psi Concrete — Why? Why not?, William Schmidt and Edward S. Hoffman, CE:May 75:52

Buildings (Recreational)
Finite Element Analyses of Arch Abutments, E. D'Appolonia, Donald E. Shaw, Jacques Richard and Daniel A. Raynaud, GT76:Aug 76:55
Olympic Construction for Olympic Games, CE:June 76:56

Buildings (Religious)
Masjid (Mosque) Designing, Altaf Hussain, UP1:Aug 76:177:12349
Masjid (Mosque) Planning, Altaf Hussain, UP1:Aug 76:171:12348

Buildings (Residential)
Economic Analysis of Residential Land-Use Alternatives, David C. Curtis and Richard H. McCuen, UP2:Nov 75:109:11678

Manpower Use in High-Rise Residential Construction, Ira H. Kleinfeld, CO2:June 76:379: 12178

Bulkheads
Design Basis Flooding at Offshore Reactor Sites, Ronald M. Noble, OE75:June 75:89
Innovative Design at Florida Bulkhead Reduces Material and Construction Costs, Anthony A. Nolan, CE:May 76:81
Optimizing Selection of Marine Retaining Walls, Robert C. Johnston, Max Bernheimer and Dominic A. Zarrella, GT12:Dec 76:1209:12624
Optimizing the Selection of Marine Retaining Walls, Robert C. Johnston, Max Bernheimer and Dominic A. Zarrella, Preprint No.2710, Apr 76, 28pp.
Performance of a Cellular Sheetpile Wharf, Warren L. Schroeder, Dennis K. Marker and Thanasarn Khuayjarernpanishk, Preprint No.2731, Apr 76, 28pp.
Performance of Tied-Back Walls in Clay, G. Wayne Clough and Yuet Tsui, GT12:Dec 74:1259:11028

Buoyancy
Submerged Buoyant Jets in Quiscent Fluids, Daniel T.L. Chan and John F. Kennedy, HY6:June 75:733: 11383
Turbulent Jets with Reversible Buoyancy, Subhash C. Jain and Jose M. Pena, HY9:Sept 75:1221:11586

Buoys
Accelerometer Wave Recording Buoy, W. F. Baird and C. W. Glodowski, OE75:June 75:1104
German Design of Floating Concrete Structures, Richard Heinen, Preprint No.2735, Apr 76, 22pp.
Luncheon Remarks at Ocean Engineering III, Robert I. Price, OE75:June 75:1485
SPM Model Testing for Proposed U.S. Superports, J. Phil Wilbourn, Preprint No.2685, Apr 76, 20pp.
Wave Forces on Large Bodies—A Survey of Numerical Methods, Jared L. Black, OE75:June 75: 924

Bureau of Reclamation
Augmentation of 1968-1972 Winter Storms in New Mexico, Conrad G. Keyes, Jr., HY12:Dec 76:1725: 12616
A History of Bureau of Reclamation Construction-Part I, Harold G. Arthur, CO1:Mar 75:51:11189
A History of Bureau of Reclamation Construction-Part II, Harold G. Arthur, CO1:Mar 75:69:11190
New Growth Centers—A Role for the Bureau of Reclamation, Victor A. Koelzer, WR2:Nov 76:311: 12576
Pressure Grouting Foundation on Teton Dam, Peter P. Aberle, GT76:Aug 76:245
Reclamation and Western Development, Donald J. Duck, WW76:Aug 76:1114

Buses (Vehicles)
An Algorithm for Route Deviation Service, Stanley T.L. Lung and Wilfred W. Recker, TE1:Feb 76:161: 11931
Bus/Carpool FWY Lanes in the San Francisco Area, Leonard Newman, Preprint No.2646, Apr 76, 26pp.
Demand Model for Bus Network Design, Jende Hsu and Vasant H. Surti, TE3:Aug 76:451:12309
Diamonds Are The Way To Go, Vincent D. Paul and Robert G.B. Goodell, Preprint No.2681, Apr 76, 12pp.
Factors Affecting Reliability of Urban Bus Services, Brian P. Sterman and Joseph L. Schofer, TE1:Feb 76:147:11930
Los Angeles Pioneers Separate Busway, Richard C. Gallagher, CE:Jan 75:64
Planning and Implementation of the Chestnut Street Transitway, William J. Grabske and Richard K. Faris, Preprint No.2803, Sept 76, 23pp.
Public Response to Carpooling Programs, Alice E. Kidder, Bruce Morgan and Arthur Saltzman, TE3: Aug 76:571:12340
Reserved Bus Lanes in Dallas, Texas, Mildred Cox, TE4:Nov 75:691:11720
The Resurgence of Light Rail Transit, Martin Lenow, TE2:May 76:229:12131
Transportation Energy Considerations, Alexander French, TE1:Feb 76:27:11919
The Wrong Way is Sometimes the Right Way, Marshall Suloway, Preprint No.2697, Apr 76, 18pp.
The Wrong Way Is Sometimes the Right Way, Marshall Suloway, TE4:Nov 76:617:12518

Bus Lanes
Bus-Carpool FWY Lanes in San Francisco Area, Leonard Newman, TE4:Nov 76:625:12530
Reserved Bus Lanes in Dallas, Texas, Mildred Cox, TE4:Nov 75:691:11720
The Wrong Way is Sometimes the Right Way, Marshall Suloway, Preprint No.2697, Apr 76, 18pp.

Bus Lines
Bus-Carpool FWY Lanes in San Francisco Area, Leonard Newman, TE4:Nov 76:625:12530
Computer-Aided Design of Urban Transit Systems, Jerry B. Schneider, Claus D. Gehner, Dennis Porter and James Clark, TE4:Nov 74:943:10936

Bus Terminals
Washington Metro Access Facilities, Mark M. Akins, CE:July 75:63

Bus Usage
Paratransit: How You May Get Around if the Energy Shortage Takes You Out of Your Car, CE: Oct 75:84
Reserved Bus Lanes in Dallas, Texas, Mildred Cox, TE4:Nov 75:691:11720

Busways
Genesee Expressway Corridor Analysis, Lawrence H. Lehman, Robert J. Trapani and Philip A. Habib, TE4:Nov 75:781:11726

Bypasses
Meeting the Challenge of Constructing a Reservoir Bypass Pipeline, Duane D. Buchholz and Roger T. Menlove, Preprint No.2644, Apr 76, 19pp.

Cables
Behavior of Prestressed Cable Truss Structures, Dwight E. Urelius and David W. Fowler, ST8:Aug 74:1627:10747

Cables (Ropes)
Analysis of Cable Dynamics—State-of-the-Art Summary, John H. Nath, OE75:June 75:623
Analysis of Cable-Stiffened Space Structures, Nicholas F. Morris, ST3:Mar 76:501:11998
Analytical Solutions for Pretensioned Cable Nets, H. Max Irvine, EM1:Feb 76:43:11908
Cable-Stayed Versus Classical Suspension Bridge, Walter Podolny, Jr., TE2:May 76:291:12130
Effective Modulus of Twisted Wire Cables, George A. Costello and James W. Phillips, EM1:Feb 76: 171:11944
Energy Approach to Inelastic Cable-Structure Analysis, Giulio Maier and Roberto Contro, EM5: Oct 75:531:11614
Fifty-Year Development: Construction of Steel Suspension Bridges, James D. Dwyer, CO1:Mar 75: 105:11176
Hanging Cable as Rotational Vibration Absorber, Ollie L. Vance and James H. Woodward, TN: EM2:Apr 76:377:12017
Hydrodynamic Forces on Cables Subject to Frequency Varied Motion, Robert W. Haas and Richard F. Dominguez, Preprint No.2728, Apr 76, 26pp.
Interactive Nonlinear Structural Analysis, Howard B. Harrison, ST7:July 76:1353:12235
Kink Formation and Rotational Response of Single and Multistrand Electromechanical Cables, Francis C. Liu, OE75:June 75:546
Lateral Stability of Cable Truss, H. Max Irvine and Paul C. Jennings, EM4:Aug 75:403:11519

Maintenance of Services during Construction, Claude Cossette and Ernest Zbinden, CO1:Mar 75:155: 11186
Modal Analysis of Cable Networks, Nicholas F. Morris, ST1:Jan 75:97:11055
Multispan Stayed Girder Bridges, Niels J. Gimsing, ST10:Oct 76:1989:12470
Natural Vibrations of Suspension Cables, Harry H. West, Louis F. Geschwindner and Joseph E. Suhoski, ST11:Nov 75:2277:11712
Nonlinear Cable and Frame Interaction, Kuang-Han Chu and David Chia-Chiun Ma, ST3:Mar 76:569: 12008
Parametric Instabilities of Cable Hanging from Ship, William C. Kerr, OE75:June 75:569
Post-Elastic Response of Suspended Cables, H. Max Irvine, EM6:Dec 75:725:11760
Recent Developments in Underwater Construction, Philip K. Rockwell, Preprint No.2669, Apr 76, 28pp.
Research on Titanium Wire Rope for Marine Use, Darrell A. Milburn and Michael Chi, Preprint No.2713, Apr 76, 21pp.
Research on Titanium Wire Rope for Marine Use, Darrell A. Milburn and Michael Chi, ST11:Nov 76: 2137:12535
Seismic Supports for Electrical Cable Systems, Anil K. Kar and Sitansu S. Sinha, PO1:July 75:95:11464
Statics and Dynamics of Cable Trusses, H. Max Irvine, EM4:Aug 75:429:11506
Statics of Suspended Cables, H. Max Irvine, EM3: June 75:187:11351
Sytems Approach to the Mechanics of Array Cables, Rolf G. Kasper, OE75:June 75:610

Cadmium
Monitoring Sludge Disposal — Mid-Atlantic Shelf, Geraldine V. Cox, Steven A. Townsend and Priya Wickramarante, OE75:June 75:1314

Caissons
Analysis and Design of Laterally Loaded Piles and Caissons in a Layered Soil System, Tarun R. Naik and Alain H. Peyrot, ST76:Aug 76:589
Analysis of Offshore Concrete Caisson Dikes under Cyclic Loading, John T. Christian and Jean M.E. Audibert, NMG:June 76:II-979
Caisson Evaluation by Stress Wave Propagation Method, Joav Steinbach and Eben Vey, GT4:Apr 75:361:11245
Concrete Structures for Subsea Oil Recovery — Design Considerations, Everald V. Wright and Marcel Gerbault, Preprint No.2675, Apr 76, 21pp.
Difficult Dam Problems - - Cofferdam Failure, Harry E. Thomas, Eugene J. Miller and John J. Speaker, CE:Aug 75:66
Earth Retention by Drilled Reinforced Concrete Caissons, Arthur H. Anderson, Jr., CE:Oct 76:54
The Equivalent Length of a Pile or Caisson in Soil, Peter Kocsis, CE:Dec 76:63

Calcareous Soils
Engineering Behavior of Calcareous Clays, Vito A. Nacci, Mian-Chang Wang and Kenneth R. Demars, OE75:June 75:380

Calcines
Lime Recovery and Reuse in Primary Treatment, Denny S. Parker, Geoffrey A. Carthew and Gerry A. Horstkotte, EE6:Dec 75:985:11789

Calcium Carbonates
Population Balance Use in Dilute Impurity Problems, John D. Stevens and Paul M. Schierholz, EE2:Apr 76:337:12034

Calculations
Pocket Calculators Take Hold in Civil Engineering, Eugene E. Dallaire, CE:Feb 75:39

Calculators
Pocket Calculators Take Hold in Civil Engineering, Eugene E. Dallaire, CE:Feb 75:39

Calibration
Float Calibration in Intergrated-Float Techniques, Peter H. John, F. Allan Johnson and Peter Sutcliffe, HY8:Aug 76:1071:12308
Movable-Bed Flow Routing in Open Channel and Its Calibration, Chian-Min Wu, WW76:Aug 76:36

Calibrations
Evaluation of Stress Cell Performance, Raymond J. Krizek, M. Hassan Farzin, Anwar E.Z. Wissa and R. Torrence Martin, GT12:Dec 74:1275:11030

California
Application of Acoustic Velocity Flowmeters, Cortland C. Lanning and Robert W. Ehrhart, Preprint No.2716, Apr 76, 19pp.
A Case History of Expansive Claystone Damage, Richard L. Meehan, Michael T. Dukes and Patrick O. Shires, GT9:Sept 75:933:11590
Clean Air Equals Dirty Water, Donald C. Tillman and Robert C. Horii, EE1:Feb 75:87:11125
County Leads in Steering Growth, Gloria S. McGregor, CE:July 75:47
Dynamic Finite Element Modeling of Near Field from San Fernando 1971 Earthquake, Samuel T. Harding and David Perkins, NMG:June 76:II-955
Effects of Suspended Dredged Material on the Commercial Crab, *Cancer Magister*, Richard Peddicord and Victor McFarland, DIEE:Jan 76:633
Energy-Wastewater Treatment and Solids Disposal, William F. Garber, George T. Ohara and Sagar K. Raksit, EE3:June 75:319:11357
Exxon's 850-ft Platform for Santa Barbara Channel, William J. Ruez, OE75:June 75:801
Flood Peaks in Southern California Desert Areas, George E. Ribble, WW76:Aug 76:1094
Flow Control and Transients in the California Aqueduct, Haywood C. Dewey, Jr. and Welby R. Madsen, IR3:Sept 76:335:12434
Highway User Benefit/Cost Analysis in California, Heinz Heckeroth and Charles E. Paulsen, TE4:Nov 76:605:12524
Horton Plaza Redevelopment Project—A Hope for Centre City San Diego, David N. Allsbrook, Preprint No.2730, Apr 76, 5pp.
Hydraulic Fill Dams/Earthquake Stability, Roney A. Heinz, CE:May 76:55
Landfill Disposal of Liquid Sewage Sludge, Ralph Stone, EE1:Feb 75:91:11112
Liquefaction during 1906 San Francisco Earthquake, T. Leslie Youd and Seena N. Hoose, GT5:May 76: 425:12143
A Model for Trace Metals from Marine Outfalls, T. J. Hendricks, OE75:June 75:1353
One Owners Dam Safety Program and Its Application Under Government Regulations, Thomas A. Kelly, EFRLD:Sept 75:105
Operations Models for Central Valley Project, Leonard Becker, William W-G. Yeh, Dan M. Fults and Donald Sparks, WR1:Apr 76:101:12062
Oscillations in Harbors Containing Islands, Jiin-Jen Lee, OE75:June 75:632
An Outline of the Enforcement of Safety of Dams Statutes in California, Porter A. Towner, EFRLD: Sept 75:87
Photoelastic Model of Bridge Cross-Frame Junction, Alex S. Redner and Leonard Pompa, EM4:Aug 76: 659:12347
Photographic Remote Sensing of Bolinas Lagoon, California, Douglas M. Pirie and Michael J. Murphy, Preprint No.2647, Apr 76, 17pp.
Planning the Tehachapi Crossing, Alfred R. Golze, HY1:Jan 75:1:11052
A Practical Monthly Optimum Operations Model, Dan M. Fults, Lawrence F. Hancock and Glen R. Logan, WR1:Apr 76:63:12063
Professional Development—An Educator's Viewpoint, Alfred C. Ingersoll, EI4:Oct 75:471: 11660
Properties of Soil in the San Fernando Hydraulic Fill Dams, Kenneth L. Lee, H. Bolton Seed, Izzat M. Idriss and Faiz I. Makdisi, GT8:Aug 75:801:11527
Responding to Our Members' Educational Needs, Edward W. Timmons, Jr., EI1:Jan 76:41:11869

San Diego-Coronado Bay Bridge: Bicycle Shuttle Service, Gene Pound and Alan McCuen, BP75:Dec 75:326
San Diego Harbor — Past and Present, Charles H. Fisher, Preprint No.2783, Sept 76, 4pp.
Sea Cliff Base Erosion, San Diego, California, Louis J. Lee, Charles Pinckney and Charles Bemis, Preprint No.2708, Apr 76, 14pp.
The Seismic Design of the Dumbarton Bridge, Charles Seim, Preprint No.2811, Sept 76, 25pp.
Some Geotechnical Aspects of Marginal Wharf Design, William Enkeboll and Vernon A. Smoots, Preprint No.2699, Apr 76, 24pp.
Text of Comments Regarding California's Legal Experience in the Liability of Public Interests, Robert W. James, EFRLD:Sept 75:115
Transient Control in Lower Sacramento River, Fred J. Gientke, HY3:Mar 74:405:10418
Use of Abandoned Gravel Pits as Spreading Grounds — Experience in Los Angeles County, Irving Sherman, IR76:July 76:461
Ventura City Hall Restoration, James Warner, CO1: Mar 76:119:11970
Water Quality Planning Strategy, George R. Grantham and Thomas E. Bailey, WR1:Apr 76:11: 12060

California Bearing Ratio
Structural Analysis of Flexible Airfield Pavements, Richard G. Ahlvin, Yu Tang Chou and Ronald L. Hutchinson, TE3:Aug 74:625:10727

Cameras
Control Densification by Analytic Photogrammetry, Wesley V. Hull, SU1:Oct 75:11:11624

Canada
Alberta's Viewpoint on Risk, John W. Campbell, EFRLD:Sept 75:147
Automatic Surveying — Updating Canada's Control, Leslie O'Brien, CE:Feb 76:57
Bedload Sampling by Pumping, H. I. Langley, WW76:Aug 76:945
Canadian University to Launch Building-Engineering Program, Alan D. Russell and Paul P. Fazio, CE: Apr 75:86
Citizen Participation: Assessing Public Attitudes, Desmond M. Connor, CE:Oct 75:78
Contribution to Selection of Railroad Ballast, Paul N. Gaskin and Gerald P. Raymond, TE2:May 76:377: 12134
Economics and Financial Aspects of Canadian Irrigation and Drainage Projects, Harry B. Rosenberg, IR76:July 76:640
Finite Element Analyses of Arch Abutments, E. D'Appolonia, Donald E. Shaw, Jacques Richard and Daniel A. Raynaud, GT76:Aug 76:55
Irrigation Return Flow Water Quality Analysis, Okay Cyril Igwe and T. L. Coulthard, IR76:July 76:519
Job-Site Innovations Slash Time, Cost of Constructing Canada's Tallest Skyscraper, Keith E. Roberts, CE:Aug 76:42
The Le Grande Hydroelectric Development, Gilles Bergevin and Richard N. Seemel, CE:Sept 76:60
Limit States Basis for Cold-Formed Steel Design, Sree R. Parimi and Niels C. Lind, ST3:Mar 76:475: 120(
Maintenance of Services during Construction, Claude Cossette and Ernest Zbinden, CO1:Mar 75:155: 11186
Mechanics of the Frank Slide, John Krahn and Norbert R. Morgenstern, GT76:Aug 76:309
Methodology for Sedimentation and Water Quality Modelling at the Humber River Mouth, Michael R. Garrett, A. Harrington, Nicholas Kouwen, A. F. Roake and Paul E. Wisner, WW76:Aug 76:650
The New Montreal International Airport, G. Y. Sebastyan, CO2:June 75:317:11346
Olympic Construction for Olympic Games, CE:June 76:56
Outlet Drainage — An Assessment of Environmental Effects, J. C. Day, R. F. Brady and M. J. Staite, IR76:July 76:445
An Overview of Environmental Effects of Agricultural Drainage in Canada, Frank R. Hore and Robert S. Broughton, IR76:July 76:138
Predictions of the Hydraulic and Morphological Changes of the "La Grande Riviere" Lower Reach System, Marcel Frenette and Octave Caron, WW76:Aug 76:1229
Project Formulation in Today's World — The New Dimensions of Legislative and Regulatory Aspects, Reginald E. Bailey, IR76:July 76:632
Providing the Profession with Design Programs, Eddie Y.L. Chien and Michael I. Gilmor, EI2:Apr 75:165:11261
Regime Studies of the Lower Fraser, Alfred John Tamburi, WW76:Aug 76:1680
Rock Squeeze Study of Two Deep Excavations at Niagara Falls, C. F. Lee and Kwan Y. Lo, GT76: Aug 76:116
Runway Rebuilding with Daily Use, Grant S. Anderson and Kenneth T. Giles, CE:Mar 75:78
Scour Holes in a Wandering Gravel River, Charles R. Neill, WW76:Aug 76:1301
Structures for Power Stations in Ontario, Canada, Wojciech A. Krajewski, PO2:Nov 76:179:12527
Use of Decision Theory in Reservoir Operation, Samuel O. Russell, HY6:June 74:809:10586

Canal Construction
The Forgotten Engineer: John Stevens and the Panama Canal, Virginia Fairweather, CE:Feb 75:54
Turbidity-Suspended Solids in Channel Construction, James L. Hunt and John J. Mank, Preprint No.2794, Sept 76, 15pp.

Canal Design
Initial Operation of the Pakistan Link Canals, Lyman R. Flook, Jr., WW76:Aug 76:1737
Shape and Size of Alluvial Canals, Shrikrishna V. Chitale, HY7:July 76:1003:12260

Canals
Analysis of Bed Profiles in Sand Bed Canals, Khalid Mahmood and Hassan Ahmadi-Karvigh, WW76: Aug 76:564
Canal Development in Early America, Richard G. Waugh, Jr., Preprint No.2774, Sept 76, 30pp.
Early Developments in American Concrete, Russell S. Fling, Preprint No.2791, Sept 76, 24pp.
Estimating Seepage Losses from Canal Systems, Robert V. Worstell, IR1:Mar 76:137:11960
Field Research in Large Sand Bed Channels, Khalid Mahmood and Riaz Nazir Tarar, WW76:Aug 76: 1318
A History of Bureau of Reclamation Construction-Part I, Harold G. Arthur, CO1:Mar 75:51:11189
Initial Operation of the Pakistan Link Canals, Lyman R. Flook, Jr., WW76:Aug 76:1737
Past and Future of Construction Equipment — Part I, Franklin J. Larkin and Stuart Wood, Jr., CO2: June 75:309:11391
Seepage from Trapezoidal Canal in Anisotropic Soil, Annapareddy S. Reddy and Udayaditya Basu, IR3: Sept 76:349:12386
Shape and Size of Alluvial Canals, Shrikrishna V. Chitale, HY7:July 76:1003:12260
Shin-Shen Canal Diversion Structure — Taipei, Taiwan, Richard R. Deussen, WW76:Aug 76:1459
Variation of Suspended Sediment in Sand Bed Canals, Gary L. Eyster and Khalid Mahmood, WW76:Aug 76:924
Water for the Valley of the Sun, William W. Reedy, Preprint No.2782, Sept 76, 27pp.
Water Resources Planning — Historical Development, Theodore M. Schad, Preprint No.2754, Sept 76, 22pp.

Can-Am Civil Engineering Amity Award
1976 Can-Am Civil Engineering Amity Award Presented to John Roche Kiely, CE:Oct 76:104

Canopy
Wind-Driven Flow of Water Influenced by a Canopy, Robert O. Reid and Robert E. Whitaker, WW1:Feb 76:61:11926

Cantilever Beams
Buckling of Cantilever Bars on Elastic Foundations, James T.S. Wang, TN: EM4:Aug 76:731:12286
Finite Deflection of Tapered Cantilevers, Gangan Prathap and Tirupathi Kumara Varadan, TN: EM3: June 76:549:12168
Minimum Weights for Circular Tube Cantilever Beams, Howard I. Epstein and Jasim M. Alsaigh, TN: ST1:Jan 76:318:11821

Cantilevers
Dynamic Response of Cantilevers with Attached Masses, Anthony N. Kounadis, EM5:Oct 75:695: 11616
Earth Retention by Drilled Reinforced Concrete Caissons, Arthur H. Anderson, Jr., CE:Oct 76:54

Canyons
Influence of Canyon on Soil-Structure Interaction, Hung L. Wong, Mihailo D. Trifunac and Kevin K. Lo, EM4:Aug 76:671:12328

Capital Costs
Discounted Cash Flow Analysis to Select Equipment, Richard Briller, EE3:June 76:595:12190
Optimizing Capital Investments in Construction, Donn E. Hancher and David K. Gebert, CO4:Dec 76:629:12606

Capital Supply
The Effect of Regulations on Productivity as Viewed by the Engineer, Billy T. Sumner, PROD:Aug 76: 219

Carbon
What's New in Water Treatment?, Virginia Fairweather, CE:Sept 75:69

Carbon Compounds
Influence of Activated Sludge CRT on Adsorption, Byung R. Kim, Vernon L. Snoeyink and F. Michael Saunders, EE1:Feb 76:55:11937

Carbon Monoxide
Air Pollution Impact of Railroad Electrification, Hal B.H. Cooper, Jr., Hoy A. Richards and Aaron T.B. Lam, EE4:Aug 76:723:12312
Impact of Air Quality on Bicyclists, Eugene E. Burr and Terry L. Miller, BP75:Dec 75:571

Carcinogens
What's New in Water Treatment?, Virginia Fairweather, CE:Sept 75:69

Careers
Career Growth for the Professional Engineer, Lindon E. Saline, CE:Nov 75:56

Cargo
Introduction to Colonial Ports, Richard L. Schultz, Preprint No.2774, Sept 76, 6pp.

Cargo Transportation
Constant Water Level Harbor: Memphis, Tennessee, Frank P. Palumbo, Jr., WW76:Aug 76:296
The Green Bay—Fox River System in Transition, Harold John Day, WW76:Aug 76:527
Revival of Inland Navigation in Pakistan, Irshad Ahmad, WW76:Aug 76:84
The Story of America's Transportation Revolution, Eugene E. Dallaire, CE:July 76:70

Car Pools
Bus-Carpool FWY Lanes in San Francisco Area, Leonard Newman, TE4:Nov 76:625:12530
Bus/Carpool FWY Lanes in the San Francisco Area, Leonard Newman, Preprint No.2646, Apr 76, 26pp.
Carpools at Large Suburban Technical Center, Robert Herman and Tenny Lam, TE2:May 75:311:11332
Carpools: How Successful?, Lew Pratsch, CE:Feb 75: 61
Diamonds Are The Way To Go, Vincent D. Paul and Robert G.B. Goodell, Preprint No.2681, Apr 76, 12pp.
Paratransit: How You May Get Around if the Energy Shortage Takes You Out of Your Car, CE: Oct 75:84
Public Response to Carpooling Programs, Alice E. Kidder, Bruce Morgan and Arthur Saltzman, TE3: Aug 76:571:12340

Cartographic Cameras
Computer Cartography Offers County Unlimited Combinations and Considerable Savings, Vern Cartwright and Joseph P. Alessandri, CE:Nov 76:60
Surveying-Mapping Research from Earth Satellites, Charles K. Paul, SU1:Oct 75:27:11628

Cash Flow
Building Construction Management Game, Kenneth F. Reinschmidt, James W. Litchfield and Steven D. Hunt, EI2:Apr 75:117:11248
Construction Cash Flow Management System, Kenneth F. Reinschmidt and Walter E. Frank, CO4:Dec 76:615:12610
Discounted Cash Flow Analysis to Select Equipment, Richard Briller, EE3:June 76:595:12190

Cast-In-Place Piles
Behavior of Bored Piles in Sand, Fadlo T. Touma and Lymon C. Reese, GT7:July 74:749:10651

Catalysts
Dye Catalyzed Oxidation of Industrial Wastes, Jerome W. Sargent and Robert L. Sanks, EE5:Oct 76:879:12453

Catamarans
Hydrodynamic Forces and Moments for Oscillating Cylinders, Yong Kwun Chung and Martha I. Coleman, OE75:June 75:899

Catastrophes
Law of Catastrophic Events on Offshore Nuclear Facilities, John D. Wik and Joseph T. Bockrath, OE75:June 75:1455

Catchments
Flood Routing Through a Balancing Lake, Elsayed M. Elsawy and Toney Edgeley, WW76:Aug 76: 1039

Cathodic Protection
Salt Damaged Bridge Decks: Cathodic Helps, Virginia Fairweather, CE:Sept 75:88

Cation Exchange
Physicochemical Properties of Dredge Spoil, Alena Mudroch and Ales J. Zeman, WW2:May 75:201: 11317

Cauchy Problem
Mathematical Aspects of Surface Runoff, Vijay P. Singh, WW76:Aug 76:773
A Numerical Solution for Viscoelastic Half Planes, Gautam Dasgupta, EM4:Aug 76:601:12325

Causeways
Study of Fluid Movements through Causeway, Ralph Ta-Shun Cheng and Min-Hsiung Hu, HY1: Jan 75:155:11076

Cavitation
Cavitation Control by Aeration of High-Velocity Jets, Glenn L. Beichley and Danny L. King, HY7:July 75:829:11462
Cavitation from Surface Irregularities in High Velocity, James W. Ball, HY9:Sept 76:1283:12435
Fibrous Concrete Repair of Cavitation Damage, Ernest K. Schrader and Anthony V. Munch, CO2: June 76:385:12198
Flow-Induced Forces on Protruding Walls, Eduard Naudascher and Frederick A. Locher, HY2:Feb 74: 295:10347
Gas Release During Transient Cavitation in Pipes, C. Kranenburg, HY10:Oct 74:1383:10892

Cavities
Cavity Expansion in Sands with Curved Envelopes, Mohsen M. Baligh, GT11:Nov 76:1131:12536
Failures in Limestones in Humid Subtropics, George F. Sowers, GT8:Aug 75:771:11521

Cellular Structures
Interlock Tension in Steel Sheet Piling, J. Neil Kay, ST10:Oct 75:2093:11638

Cell Yield
Yeast Plant Wastewater Treatment, Yeun C. Wu and Chiao F. Kao, EE5:Oct 76:969:12468

Cementing
Finite Element Analysis of Cement Fill Exposures, John L. Meek and R. W. Kirkby, NMG:June 76:II-901

Cements
Early Developments in American Concrete, Russell S. Fling, Preprint No.2791, Sept 76, 24pp.
Ferrocement Load-Bearing Wall Elements, Prakash Desayi and Arun D. Joshi, ST9:Sept 76:1903:12420
Fracture and Stress-Strain Relationship of Concrete Under Triaxial Compression, Ranga Palaniswamy and Surendra P. Shah, ST5:May 74:901:10547
Load-Induced Strains in Hardened Cement Paste, Leslie J. Parrott and John M. Illston, EM1:Feb 75:13:11118
New and Conventional Engineering Uses of Fly Ash, Ramesh C. Joshi, Donald M. Duncan and Howard M. McMaster, TE4:Nov 75:791:11730
Pressure Grouting Foundation on Teton Dam, Peter P. Aberle, GT76:Aug 76:245

Central Business Districts
Greater Lawrence Transportation Improvements Study, Maurice Freedman, Preprint No.2763, Sept 76, 30pp.
Horton Plaza Redevelopment Project—A Hope for Centre City San Diego, David N. Allsbrook, Preprint No.2730, Apr 76, 5pp.
The Impact of Office Space and Parking Distribution on Commuter Modal Choice, Joseph J. McCourt and William C. Miller, Preprint No.2790, Sept 76, 26pp.
Interdisciplinary Approach to Central City Development, Albert A. Dorman, Preprint No.2749, Sept 76, 10pp.
Maintenance of Delivery Services for Chicago's State Street Transit Mall, Thomas P. Kaeser, BP75:Dec 75:528
Parking — First Stage in Downtown Redevelopment, Richard S. Beebe, Preprint No.2780, Sept 76, 10pp.
Pedestrianization of the Central City, Harold Lewis Malt, BP75:Dec 75:214
Security, Safety and Related Aspects of Pedestrian Design for the New Eleventh Street Station of the Philadelphia Center City Commuter Rail Connection, Simon M. Langberg, BP75:Dec 75:516
Skyways in Minneapolis/St. Paul: Prototypes for the Nation?, C. Todd Heglund and Richard C. Podolske, BP75:Dec 75:482

Central City
Horton Plaza Redevelopment Project—A Hope for Centre City San Diego, David N. Allsbrook, Preprint No.2730, Apr 76, 5pp.

Centrifugation
Dewatering Chemical-Primary Sludges, David Di Gregorio and Gerald L. Shell, EE5:Oct 76:1087:12474

Change Orders
Improving Productivity in Industrial Construction, John D. Borcherding, CO4:Dec 76:599:12595

Channel Design
Mild Slope Stable Channels — A Stochastic Design Approach, Bent A. Christensen, Preprint No.2680, Apr 76, 14pp.
Nonlinear Channel Routing by Computer, Michael C. Quick and Anthony Pipes, HY6:June 75:651:11353

Channel Flow
Spatially Varied Flow in Channel Transitions, David T.Y. Kao and S. Dean Perry, WW76:Aug 76:1551

Channel Improvements
Field Research in Large Sand Bed Channels, Khalid Mahmood and Riaz Nazir Tarar, WW76:Aug 76:1318
Scour Holes in a Wandering Gravel River, Charles R. Neill, WW76:Aug 76:1301
Thalweg Disposal of Riverine Dredged Material, Peter F. Lagesse, Daryl B. Simons and Yung H. Chen, DIEE:Jan 76:556

Channelization
Channelization of River Bhargavi, India, Bishnu P. Das, WW76:Aug 76:1700
Detrimental Effects of River Channelization, Gary Parker and David Andres, WW76:Aug 76:1248
Outlet Drainage — An Assessment of Environmental Effects, J. C. Day, R. F. Brady and M. J. Staite, IR76:July 76:445

Channels
Analysis of Flow through Vegetation, Sylvester Petryk, HY7:July 75:871:11457
Autogeometry of Semi-Arid Channel Systems, John Barrie Thornes, WW76:Aug 76:1715
Boundary Shear in Channel with Flood Plain, Robert C. Myers and Elsayed M. Elsawy, HY7:July 75:933:11452
Channel Entrance Response to Jetty Construction, J. M. Kieslich and Curtis Mason, OE75:June 75:689
Channel Flow Over Permeable Beds of Graded Spheres, Anthony F.E. Zagni and Kenneth V.H. Smith, HY2:Feb 76:207:11892
Computer Modeling of Erodible Flood Channels and Deltas, Howard H. Chang and Joseph C. Hill, HY10:Oct 76:1461:12485
Development and Future of Dredging, Adolph W. Mohr, WW2:May 74:69:10513
Dredging and the National Environmental Policy Act of1969, James H. Bradley, Preprint No.2734, Apr 76, 16pp.
Extreme Roughness of Natural River Channel, Hans J. Leutheusser and W. Orville Chisholm, HY7:July 73:1027:9831
Flow Resistance in Broad Shallow Grassed Channels, Cheng-lung Chen, HY3:Mar 76:307:11994
A Geomorphic Study of Pool 25 in the Upper Mississippi River, Michael A. Stevens, Stanley A. Schumm and Daryl B. Simons, WW76:Aug 76:1655
Giuseppe Venturoli, Pioneer in Channel Studies, Rene Chevray, HY10:Oct 76:1533:12488
Manning's Roughness for Artificial Grasses, Walter H. Graf and V. Heang Chhun, IR4:Dec 76:413:12603
Mass Transport and Mean Water Level, Jacobus van de Kreeke, OE75:June 75:1266
Nebraska Flood-Plain Management Program—Part II, James R. Cook, HY7:July 75:983:11438
New Diver-Operated Bedload Sampler, Dennis G. Waslenchuk, HY6:June 76:747:12179
Regime Equations and Tidal Inlets, Curtis Mason, WW3:Aug 73:393:9952
Simulation of Hydraulic Processes in Open Channels, Chao-Lin Chiu, Hsin-Chi Lin and Kazumasa Mizumura, HY2:Feb 76:185:11905
Sinkage and Resistance for Ships in Channels, John S. McNown, WW3:Aug 76:287:12291
Waters of the United States, William L. Black, DIEE:Jan 76:10

Channels (Waterways)
Classification and Analysis of River Processes, Rolf Kellerhals, Michael Church and Dale I. Bray, HY7:July 76:813:12232
Dredging and the Environmental Policy Act of 1969, James H. Bradley, DIEE:Jan 76:39
Economic Role of the Waterway in Western Europe, Maurice Marchal, WW3:Aug 76:337:12346

Effects of Meandering in Alluvial Streams, Yasuo Onishi, Subhash C. Jain and John F. Kennedy, HY7:July 76:899:12248
Energy and Pollution Concerns in Dredging, Adolph W. Mohr, WW4:Nov 75:405:11733
Free Surface Slopes at Controls in Channel Flow, David L. Wilkinson, HY8:Aug 74:1107:10753
Increasing the Mean Current in Coastal Channels, Jacobus van de Kreeke, WW2:May 76:223:12157
Mass Transport and Mean Water Level, Jacobus van de Kreeke, OE75:June 75:1266
Optimum Dredged Depth in Inland Waterway, Anatoly B. Hochstein, WW4:Nov 75:331:11698
Point Source Dispersion in Turbulent Open Channels, Kemal M. Atesmen, HY7:July 75:789:11413
The Port of Philadelphia — Past and Present, Clarence F. Wicker, Preprint No.2774, Sept 76, 20pp.
Quarantine Island Disposal Plan, George Marsch, DIEE:Jan 76:579
Recent Legislation Impacting on Dredging Projects, William L. Black, Preprint No.2727, Apr 76, 23pp.
Speed of Ships in Restricted Navigation Channels, R. Bryan Schofield, WW2:May 74:133:10539
Stochastic Models of Sediment Motion on Flat Bed, Che S. Hung and Hsieh W. Shen, HY12:Dec 76:1745:12639
Supercritical Flow Over Sills, Karam S. Karki, HY10:Oct 76:1449:12480

Channel Stabilization
Man-Induced Changes of Middle Mississippi River, Michael A. Stevens, Daryl B. Simons and Stanley A. Schumm, WW2:May 75:119:11281
Safety Factors for Riprap Protection, Michael A. Stevens, Daryl B. Simons and Gary L. Lewis, HY5:May 76:637:12115
Stability of Channel Beds by Armoring, William C. Little and Paul G. Meyer, HY11:Nov 76:1647:12519

Characteristics
One-Dimensional Soil Transients by Characteristics, E. Benjamin Wylie and Victor L. Streeter, NMG:June 76:I-151
Solution for Unsteady Open Channel Flow, Fred D. Theurer, A. H. Barnes and Everett V. Richardson, WW76:Aug 76:1497
Some Effects of Dynamic Soil Properties on Soil-Structure Interaction, Frank E. Richart, Jr., GT12:Dec 75:1193:11764

Check Valves
Hydraulic Performance of Tilting-Disk Check Valves, Ronald S. Kane and Soung M. Cho, HY1:Jan 76:57:11873

Chemical Agent Detection
Chemical Models for Metals in Coastal Environments, J. J. Morgan and T. H. Sibley, OE75:June 75:1332

Chemical Oxygen Demand
Effects of Shock Temperature on Biological Systems, John L. Carter and William F. Barry, EE2:Apr 75:229:11239
Role of Nitrogen in Activated Sludge Process, Yeun C. Wu, EE5:Oct 76:12454
Yeast Plant Wastewater Treatment, Yeun C. Wu and Chiao F. Kao, EE5:Oct 76:969:12468

Chemical Removal (Sewage Treatment)
Phosphorus Uptake by Biological Slimes, Alphonse E. Zanoni, EE6:Dec 76:1229:12621

Chemical Removal (Water Treatment)
Laboratory Evaluation of Polymeric Flocculants, Andrew Benedek and John J. Bancsi, EE1:Feb 76:17:11887

Chemical Treatment
Flow Equalization—Plus for Wastewater Treatment Plants, Virginia Fairweather, CE:Sept 75:66
Sanitary Landfill Leachates and Their Leachate Treatment, Edward S.K. Chian and Poppe B. DeWalle, EE2:Apr 76:411:12033

Chemical Wastes
Evaluation of the Factors Influencing the Results of the Elutriate Test for Dredged Material Disposal Criteria, G. Fred Lee, Jose M. Lopez and M. D. Piwoni, DIEE:Jan 76:253

Chicago
Analytical Study of Freeway Reliability, Abishai Polus and Joseph L. Shofer, TE4:Nov 76:857:12570
Chicago Urban Transportation Planning, Harold E. Nelson and William L. Barnes, Preprint No.2815, Sept 76, 27pp.
Competitive Alternative to Minority Quotas/Goals, Jerome R. Butler, Jr. and Doug Hunt, CE:Sept 75:104
Fifty-Year History of Movable Bridge Construction—Part III, Reece H. Wengenroth, Howard A. Mix and Egbert R. Hardesty, CO3:Sept 75:545:11555
Karl Terzaghi and the Chicago Subway, Ralph B. Peck, EI4:Oct 75:477:11668
Maintenance of Delivery Services for Chicago's State Street Transit Mall, Thomas P. Kaeser, BP75:Dec 75:528
New Concepts-Byproducts of Computer Technology, Fazlur R. Khan, ST4:Apr 75:627:11243
The Wrong Way Is Sometimes the Right Way, Marshall Suloway, TE4:Nov 76:617:12518

Chimneys
Aerodynamic Investigations of In-Line Slender Towers for Heavy Water Plants, K. R. Cooper, H. P.A.H. Irwin and R. L. Wardlaw, ST76:Aug 76:286
Experimental Methods and Instrumentation for Power Generation Structures — Some Case Studies, Joseph W. Fortey and Raymond R. Funk, Preprint No.2717, Apr 76, 25pp.

China
The Yellow River: Its Unique Features and Serious Problems, Tsung-Lien Chou, WW76:Aug 76:507

Chlorides
Salt Storage and Runoff in Urban Watershed, Richard H. Hawkins, EE4:Aug 76:737:12292

Chlorination
Concentric Waste-Treatment Plant Saves Land, Sterling G. Brisbin, CE:Feb 76:74
Optimal Design of Chlorination Systems, Madhav L. Tikhe, EE5:Oct 76:1019:12487
Sanitary Landfill Leachates and Their Leachate Treatment, Edward S.K. Chian and Poppe B. DeWalle, EE2:Apr 76:411:12033
Sewage Chlorination Versus Toxicity -- A Dilemma?, Harvey F. Collins and David G. Deaner, EE6:Dec 73:761:10190

Chlorine Compounds
Optimal Design of Chlorination Systems, Madhav L. Tikhe, EE5:Oct 76:1019:12487

Church Location
Masjid (Mosque) Designing, Altaf Hussain, UP1:Aug 76:177:12349

Circulation
Steady Stratified Circulation in a Cavity, Der-Liang Young, James A. Liggett and Richard H. Gallagher, EM1:Feb 76:1:11903
Unsteady Stratified Circulation in a Cavity, Der-Liang Young, James A. Liggett and Richard H. Gallagher, EM6:Dec 76:1009:12643

Cities
Professional Engineers as Elected Local Officials, Kenneth R. Wright and Douglas T. Sovern, EI4:Oct 76:447:12504

Civil Engineering
The Aerospace Industry and the Civil Engineer, W. James King and Donald McDonald, Preprint No.2808, Sept 76, 20pp.
Attitudinal Variables in Civil Engineering Design, Wilfred W. Recker and George C. Lee, EI1:Jan 76: 55:11862
Civil Engineering and Offshore Construction, Ben C. Gerwick, Jr., Preprint No.2753, Sept 76, 6pp.
Civil Engineering History Gives Valuable Lessons, Sara Ruth Watson, CE:May 75:48
Civil Engineering Management - Prerequisites and Objectives, Eugene J. Peltier, EI1:Jan 75:5:11060
The Code of Ethics of the American Society of Civil Engineers, Mario G. Salvadori, EI2:Apr 75:215: 11252
Community Environmental Action Program for Civil Engineers, Gerald R. Dyson, Chmn., EI2:Apr 75: 259:11211
Conventional Versus Integrated Courses in Structural Analysis and Design, William G. Murphy and William J. Hall, ST76:Aug 76:997
Development of the Continental Shelf, William S. Gaither, Preprint No.2813, Sept 76, 9pp.
Historic Preservation and the Role of the Civil Engineer, Ernest Allen Connally, Preprint No.2744, Sept 76, 11pp.
History of ASCE and Civil Engineering, CE:Apr 75: 67
The History of Computers — A Vendor's View, Vincent J. Vitagliano, Preprint No.2759, Sept 76, 22pp.
The Professional Engineer Half a Century Hence, Alfred C. Ingersoll, CE:Mar 75:74
Progress Report on Development of A Code of Ethics, Marvin W. Runyan, EI2:Apr 75:199:11225
Rationalized Esthetics in Civil Engineering, Clayford T. Grimm, ST9:Sept 75:1813:11546
Reforming Civil Engineering Education, Robert M. Sykes, CE:July 75:61
University of Wisconsin: A Success Story in Continuing Engineering Education, CE:Sept 75:101
We Created the Problem; Only We Can Solve It!, Jack R. Janney, EI3:July 75:429:11436

Civil Engineering History and Herita
1976 Civil Engineering History and Heritage Award Presented to Neal FitzSimons, CE:Oct 76:104

Civil Engineers
Applications of Photoelasticity to Structural Analysis, J. F. Jullien, R. Duhau and J. C. Cubaud, EM5:Oct 76:867:12486
Art in Engineering - The Need for a New Criticism, David P. Billington, PP4:Oct 73:499:10102
Civil Engineering Management - Prerequisites and Objectives, Eugene J. Peltier, EI1:Jan 75:5:11060
Civil Engineers and Unions in Sweden, Robert D. Holtz, CE:Nov 75:53
College Admissions for Engineering and Technology, Donald G. Dickason, CE:Feb 76:60
Corps Guidelines for Dam Safety Inspection Need Revamping, Bob J. Buehler, CE:Jan 75:74
Engineering Education: Can It be More Practical?, Robert W. Richards, CE:July 75:60
The Engineer's Response to Nonengineering Criticism of His Professional Work, John E. Spitko, Jr., EI1:Jan 75:1:11062
Enlightened Employers' Continuing Education Policies, John P. Klus, Lowell B. Jackson and C. Allen Wortley, EI3:July 75:419:11428
Environmental Impact Statements and Civil Engineering, Martin P. Wanielista, Waldron M. McLellon and Lawrence L. Smith, EI3:July 75:321: 11418
Historic Preservation and the Role of the Civil Engineer, Ernest Allen Connally, Preprint No.2744, Sept 76, 11pp.
The Making of a "Pro"—A Faculty Viewpoint, Dan H. Pletta, EI3:July 74:217:10645
Management Careers for Engineers, Harold G. Evans, EI4:Oct 76:409:12497
Political Involvement of Civil Engineers, Allen W. Hatheway, EI1:Jan 76:11:11866
Proposed Professional Advancement Recognition (PAR) Program, C. Allen Wortley, EI1:Jan 76:117: 11861
Public Versus Client Interests - An Ethical Dilemma for the Engineer, Terry L. Turnock, EI1:Jan 75:61: 11083
William D. Henderson: Man, Engineer, Priest Minister, Nhora I. Cortes-Comerer, CE:Mar 76:63
1975 ASCE Salary Survey, Schaefer J. Dixon, Chmn., EI2:Apr 76:225:12090

Civil Government Award
1976 Civil Government Award Presented to Floyd D. Peterson, CE:Oct 76:104

Civil Rights
Competitive Alternative to Minority Quotas/Goals, Jerome R. Butler, Jr. and Doug Hunt, CE:Sept 75: 104

Cladding
Cladding and the Wind, Keith J. Eaton, ST5:May 76: 1043:12114
Loadings and Codes for Typhoon Resistant Design, Hatsuo Ishizaki, ST10:Oct 76:2073:12496

Clarity
Improving Your Writing, Eugene E. Dallaire, CE:Jan 75:60
Improving Your Writing — Part II, Eugene E. Dallaire, CE:Apr 75:80

Classification
Masjid (Mosque) Planning, Altaf Hussain, UP1:Aug 76:171:12348
Remote Classification of Marine Sediments, Arthur S. Westneat, DIEE:Jan 76:289

Clays
Analysis of Consolidation in Cores of Earth Dams, Zdenek Eisenstein, Addanki V.G. Krishnayya and Steven T.C. Law, NMG:June 76:II-1089
Analysis of Shear-Induced Anisotropy in Leda Clay, K. T. Law and Kwan Y. Lo, NMG:June 76:I-329
Anisotropy and Stress Reorientation in Clay Under Load, Hideki Ohta and C. Peter Wroth, NMG:June 76:I-319
Anisotropy for Finite Element Analysis, Ravikumar Bhaskaran, NMG:June 76:I-345
At-Rest Lateral Earth Pressure of Consolidating Clay, M. Salah Abdelhamid and Raymond J. Krizek, GT7:July 76:721:12240
Behavior of Compacted Soil in Tension, Abbanki V. Gopala Krishnayya, Zdenek Eisenstein and Norbert R. Morgenstern, GT9:Sept 74:1051:10828
Bending Test for Compacted Clays, Arif Ajaz and Richard H.G. Parry, GT9:Sept 76:929:12404
Calculation of Raft Foundations on Clayey Silts, Quirin Laumans and Hermann Schad, NMG:June 76:I-475
Consolidation of Root-Penetrated Clays: A Case Study, Michael W. O'Neill, B. Kent Merritt and Ronald Calsing, GT8:Aug 76:857:12318
Consolidation of Thick Beds of Clay, Pasquale De Simone and Carlo Viggiani, NMG:June 76:II-1067
Consolidation Settlement of a Layered Subsurface, Surendra K. Saxena, Chandrakant S. Desai and Jayant Vir, NMG:June 76:II-1082
A Constitutive Equation for Normally Consolidated Clays, Toshihisa Adachi, NMG:June 76:I-282
Deformation of Deep Excavations, Dieter Stroh and Herbert Breth, NMG:June 76:II-686
Diaphragm Wall Construction Techniques, Kevin L. Nash, CO4:Dec 74:605:11025
Directional Drying Rates for Anisotropic Clays, Jack L. Rosenfarb, M. Salah Abdelhamid and Raymond J. Krizek, TN: GT2:Feb 76:188:11885
Effects of Straining on Shear Modulus of Clays, Donald G. Anderson and Frank E. Richart, Jr., GT9:Sept 76:975:12428
Engineering Behavior of Calcareous Clays, Vito A. Nacci, Mian-Chang Wang and Kenneth R. Demars, OE75:June 75:380

Experimental Work for Active Clays in Mississippi, T. C. Paul Teng and M. Barrett Clisby, TE1:Feb 75:77:11105
Finite Element Model for Cohesive Sediment Transport, Ranjan Ariathurai and Ray B. Krone, HY3:Mar 76:323:11987
Finite Element Study of a Shallow Tunnel in Rock Exhibiting Clay-Induced Anisotropy, C. F. Lee and Kwan Y. Lo, NMG:June 76:II-834
The Hawkins Hydraulic Fill Dam, Kenneth L. Lee and Wolfgang Roth, Preprint No.2662, Apr 76, 20pp.
Identification and Nature of Dispersive Soils, James L. Sherard, Lorn P. Dunnigan and Rey S. Decker, GT4:Apr 76:287:12052
In-situ Shear Test for Rock Fills, Surendra P. Jain and Ramesh C. Gupta, GT9:Sept 74:1031:10823
Laboratory Study of the Turbidity Generation Potential of Clay Mixtures, David R. Cogley, Barry A. Wechsler and Ralph D'Agostino, DIEE:Jan 76:964
Lateral Earth Pressure at Rest in Soft Clay, K. Rainer Massarsch and Bengt B. Broms, GT10:Oct 76:1041:12476
Lateral Loading of Deep Foundations in Stiff Clay, Lymon C. Reese and Robert C. Welch, GT7:July 75:633:11456
Lessons Learned in Finite Element Analyses of Temporary Excavations in Soft Clay, G. Wayne Clough and Abdulaziz I. Mana, NMG:June 76:I-496
Marine Sediment Pollution Study by Electric Conductivity Method, Mian-Chang Wang, David H. Killoy and Vito A. Nacci, Preprint No.2664, Apr 76, 19pp.
Micromechanics Model for Creep of Anisotropic Clay, Zdenek P. Bazant, I. Kutay Ozaydin and Raymond J. Krizek, EM1:Feb 75:57:11138
New and Conventional Engineering Uses of Fly Ash, Ramesh C. Joshi, Donald M. Duncan and Howard M. McMaster, TE4:Nov 75:791:11730
New Design Procedure for Stability of Soft Clays, Charles C. Ladd and Roger Foott, GT7:July 74:763:10664
New York's Glacial Formation of Varved Silt and Clay, James D. Parsons, GT6:June 76:605:12218
Nonlinear Analyses in Soil and Solid Mechanics, Hugh L. Davidson and Wai F. Chen, NMG:June 76:I-205
On Constitutive Laws for Soils and Rocks, Gerd Gudehus, NMG:June 76:III-1305
On Load Tests in Soft Clays, Bernd R. Thamm, NMG:June 76:I-557
Pinhole Test for Identifying Dispersive Soils, James L. Sherard, Lorn P. Dunnigan, Rey S. Decker and Edgar F. Steele, GT1:Jan 76:69:11846
Prediction of Downdrag Forces in End-Bearing Piles, Harry G. Poulos and Edward H. Davis, GT2:Feb 75:189:11144
Quasi-Static Deep Penetration in Clays, Mohsen M. Baligh and Ronald F. Scott, GT11:Nov 75:1119:11706
Stability of Embankment on Clay, Tien H. Wu, William B. Thayer and Sheng S. Lin, GT9:Sept 75:913:11584
Stability of Trenches Filled with Fluids, Kevin L. Nash, CO4:Dec 74:533:11006
Strength of One Dimensionally Consolidated Clays, Adel S. Saada and Gary F. Bianchini, GT11:Nov 75:1151:11707
Stress-Path Dependent Deformation Moduli of Clay, Yudhbir and A. Varadarajan, GT3:Mar 75:315:11198
Stress-Strain Behavior of Soft Bangkok Clay, A. S. Balasubramaniam and A. R. Chaudhry, NMG:June 76:I-390
Stress-Strain Properties of Compacted Clays, David E. Daniel and Roy E. Olson, GT10:Oct 74:1123:10869
Temporary Excavation in Varved Clay, Donald J. Murphy, G. Wayne Clough and Robert S. Woolworth, GT3:Mar 75:279:11179
Time-Dependent Increase in Shear Modulus of Clay, Donald G. Anderson and Richard D. Woods, GT5:May 76:525:12147
Undrained Stress-Strain-Time Behavior of Clays, Jean-Herve Prevost, GT12:Dec 76:1245:12644
Use of Vane Shear Test for Determining the Undrained Shear Strength of Clays, Odd S. Gregersen, GT75:June 75:II-141
Viscoplastic Constitutive Matrix Corresponding to the Hyperbolic Sine Creep Law, Guenter W. Borm, NMG:June 76:I-357
Water Quality and Aquitard Permeability, James H. Hardcastle and James K. Mitchell, IR2:June 76:205:12203

Clay Shales
Predicting Deformation in the Fort Union Formation, Van A. Silver, Samuel P. Clemence and Richard W. Stephenson, GT76:Aug 76:13

Clay Soils
Strain Rate Behavior of Compacted Silt, Nikhilesh Roy and Parth Sarathi, GT4:Apr 76:347:12024
Subsurface Drainage Related to Agronomic Factors on Brookston Clay Soil, E. F. Bolton and Frank R. Hore, IR76:July 76:221

Claystones
A Case History of Expansive Claystone Damage, Richard L. Meehan, Michael T. Dukes and Patrick O. Shires, GT9:Sept 75:933:11590
On Constitutive Laws for Soils and Rocks, Gerd Gudehus, NMG:June 76:III-1305

Climatic Data
Predictions of the Hydraulic and Morphological Changes of the "La Grande Riviere" Lower Reach System, Marcel Frenette and Octave Caron, WW76:Aug 76:1229

Climatology
Climatological Estimates of Evapotranspiration, Fred I. Morton, HY3:Mar 76:275:11974

Clogging
Unsaturated Flow During Soil Treatment of Septic Tank Effluent, Johannes Bouma, EE6:Dec 75:967:11783

Closed Conduit Flow
Measuring Water Velocity by Ultrasonic Flowmeter, Jack C. Schuster, HY12:Dec 75:1503:11806

Closed Loop Systems
Flows Split in Closed Loops Expending Least Energy, Madan L. Arora, TN: HY3:Mar 76:455:11954

Cloud Seeding
Augmentation of 1968-1972 Winter Storms in New Mexico, Conrad G. Keyes, Jr., HY12:Dec 76:1725:12616

Coagulation
Laboratory Study of the Turbidity Generation Potential of Clay Mixtures, David R. Cogley, Barry A. Wechsler and Ralph D'Agostino, DIEE:Jan 76:964
Yeast Plant Wastewater Treatment, Yeun C. Wu and Chiao F. Kao, EE5:Oct 76:969:12468

Coal
Availability of Water for Coal Conversion, Phil Q. Gibbs, WR2:Nov 76:219:12540
Statistical Variation of the Compliance of Coal, Richard Henry Atkinson and Hon-Yim Ko, NMG:June 76:I-367

Coal Mine Wastes
Coal Pile Leachate—Quantity and Quality Characteristics, William C. Anderson and Mark P. Youngstrom, EE6:Dec 76:1239:12626

Coal Mining
Water Conflicts in Western Coal Development, Theodore T. Williams, WR2:Nov 76:327:12562

Coastal Engineering
Automated Hydrographic Survey Systems, Pressley L. Campbell, OE75:June 75:1181
Chemical Models for Metals in Coastal Environments, J. J. Morgan and T. H. Sibley, OE75:June 75:1332
Coastal Dispersion of Pollutants, Ryszard B. Zeidler, WW2:May 76:235:12121
Coastal Engineering—State-of-the-Art Summary, Kiyoshi Horikawa, OE75:June 75:217
Coastal Management: Impact on the Ocean Engineer, Francis X. Cameron, OE75:June 75:1451
Computation of Flow through Masonboro Inlet, N.C., Michael Amein, WW1:Feb 75:93:11124
Computation of Wave Heights Due to Refraction and Friction, Ove Skovgaard, Ivar G. Jonsson and Jens Aa. Bertelsen, WW1:Feb 75:15:11100
Conditional Expected Tsunami Inundation for Hawaii, Wm. Mansfield Adams, WW4:Nov 75:319:11702
Data Acquisition Methods for Coastal Currents, Paul G. Teleki, F. R. Musialowski and D. A. Prins, OE75:June 75:1190
Dynamic Behavior of Box-Girder Jetties, Trevor J. Poskitt, WW2:May 75:181:11310
Effect of Structures on Irregular Waves Compared to Regular Waves, Yvon Ouellet and Yvon Morin, WW3:Aug 75:231:11494
Energy Dissipation on a Rough Slope, Ole Secher Madsen and Stanley M. White, WW1:Feb 76:31:11904
Extreme Wave Height Distributions Over Oceans, Herbert C.S. Thom, WW3:Aug 73:355:9939
Field Performance of Permeable Breakwater, John C. Ludwick, Peter Fleischer, Ronald E. Johnson and Gerald L. Shideler, WW4:Nov 75:357:11703
Friction Factor under Oscillatory Waves, J. William Kamphuis, WW2:May 75:135:11292
Gravity Waves Propagated over Permeable Bottom, Stanislaw R. Massel, WW2:May 76:111:12107
Impact of Dredge and Fill on Coastal Economic Development, Andrew A. Dzurik, DIEE:Jan 76:378
Interaction of Water Waves with Cylinder Barrier, Stanislaw R. Massel, WW2:May 76:165:12125
Lake Erie Airport Study — A Status Report, Herbert R. Crawford, Preprint No.2635, Apr 76, 27pp.
Mass Transport and Mean Water Level, Jacobus van de Kreeke, OE75:June 75:1266
Nearshore Wave Direction Gage, William R. James and Robert J. Hallermeier, WW4:Nov 76:379:12552
New Instruments for Studying Ocean Pollution, Willard Bascom, Preprint No.2721, Apr 76, 13pp.
Oregon Coast Shoreline Changes Due to Jetties, Paul D. Komar, Jose Roman Lizarraga-Arciniega and Thomas A. Terich, WW1:Feb 76:13:11933
Spartina Revegetation on Dredge Spoil in SE Marshes, William M. Dunstan, Gregory L. McIntire and Herbert L. Windom, WW3:Aug 75:269:11530
Partial Wave Damping in Pneumatic Breakwaters, Iver Brevik, HY9:Sept 76:1167:12374
Photographic Remote Sensing of Bolinas Lagoon, California, Douglas M. Pirie and Michael J. Murphy, Preprint No.2647, Apr 76, 17pp.
Prediction of Wind Wave Heights, Henry T. Falvey, WW1:Feb 74:1:10324
The Present Perspective of Edge Waves and Coastal Dynamics, Billy L. Edge, OE75:June 75:265
Quadratic Finite Elements in Shallow Water Problems, Paul W. Partridge and Carlos A. Brebbia, HY9:Sept 76:1299:12418
Quadratic Loss and Scattering of Long Waves, Chiang C. Mei, Philip L-F. Liu and Arthur T. Ippen, WW3:Aug 74:217:10754
Satellite Measurements of Turbidity of Coastal Waters, Edward Yost, OE75:June 75:1170
Sea Cliff Base Erosion, San Diego, California, Louis J. Lee, Charles Pinckney and Charles Bemis, Preprint No.2708, Apr 76, 14pp.
Some Remarks on Computer Modeling of Coastal Flows, Hugo B. Fischer, WW4:Nov 76:395:12520
Statistics of Random Wave Field, Keikhosrow Pajouhi and Chi C. Tung, WW4:Nov 75:435:11734
Thermal Analysis of Frozen Embankment Islands, Guy R. Bafus and Gary L. Guymon, WW2:May 76:123:12139
Tide-Induced Mass Transport in Lagoons, Jacobus van de Kreeke and Robert G. Dean, WW4:Nov 75:393:11731
Transient Drainage Flow Analysis for a Coastal Site, Yung-chi Chang and Yun-jui Tsai, OE75:June 75:1046
Transverse Forces on Vertical Cylinders in Waves, Michael de St. Q. Isaacson and David J. Maull, WW1:Feb 76:49:11934
Velocities Above Rough Bed in Oscillatory Flow, John F.A. Sleath, WW4:Nov 74:287:10930
Wave Energy Transfer Mechanisms in Wind-Wave Tunnels, James B. Bole, WW4:Nov 74:325:10932
Wave Forces on Cylinders Near Plane Boundary, Tokuo Yamamoto, John H. Nath and Larry S. Slotta, WW4:Nov 74:345:10944
Wave-Induced Mass Transport in Water Waves, Robert A. Dalrymple, WW2:May 76:255:12158
Wave Induced Pressures on Submerged Plates, William W. Durgin and Jong-Chiang Shiau, WW1:Feb 75:59:11098
Wave Motion in Rockfill, Mohamed Sameh Nasser and John A. McCorquodale, WW2:May 75:145:11286
Waves of Maximum Height on Uniform Currents, Robert A. Dalrymple and Robert G. Dean, WW3:Aug 75:259:11509
Wave Transmission through Porous Structures, Ole Secher Madsen, WW3:Aug 74:169:10714
Wind-Driven Flow of Water Influenced by a Canopy, Robert O. Reid and Robert E. Whitaker, WW1:Feb 76:61:11926

Coastal Structures
Energy Dissipation on a Rough Slope, Ole Secher Madsen and Stanley M. White, WW1:Feb 76:31:11904

Coast Guard
U.S. Coast Guard's Role in Environmental Protection, William M. Devlin, Preprint No.2725, Apr 76, 10pp.

Coatings
The Corrosion of Coated Steel Piles in the Ocean, E. Escalante, W. P. Iverson and W. F. Gerhold, Preprint No.2733, Apr 76, 22pp.
Ice Removal From the Walls of Navigation Locks, Guenther E. Frankenstein, James L. Wuebben, H. H.G. Jellinek and R. Yokota, WW76:Aug 76:1487
New Era in Fire Protective Coatings for Steel, William A. Rains, CE:Sept 76:80

Codes
AISC Code Compliance Provisions of ICES STRUDL-II, Michael G. Samuchin, ST76:Aug 76:756
California Coastal Commission Accepts Advice from ASCE on Earthquake Design Controversy, Samuel H. Clark, CE:May 76:85
California's Seismic Design Criteria for Bridges, James H. Gates, ST12:Dec 76:2301:12636
Effect of Building Regulations on Built Environment, Daniel L. Schodek, EI3:July 76:293:12261
Limit States Basis for Cold-Formed Steel Design, Sree R. Parimi and Niels C. Lind, ST3:Mar 76:475:12009
Optimal Design of Plane Frames, Jasbir S. Arora, Edward J. Haug, Jr. and Kwan Rim, ST10:Oct 75:2063:11633
Practical Approach to Code Calibration, Wilfred W.C. Siu, Sree R. Parimi and Niels C. Lind, ST7:July 75:1469:11404
Some Aspects of Theory and Applications of Numerical Methods, Chandrakant S. Desai, NMG:June 76:1-58

Coding Systems
Practical Approach to Code Calibration, Wilfred W.C. Siu, Sree R. Parimi and Niels C. Lind, ST7: July 75:1469:11404

Coefficients
Coefficients to Analyze Rectangular Slab Bridges, Iman Hossain, ST1:Jan 75:151:11048
Comparison of Numerical Schemes, John C. Bruch, Jr. and Roland W. Lewis, NMG:June 76:I-115
Extreme Roughness of Natural River Channel, Hans J. Leutheusser and W. Orville Chisholm, HY7:July 73:1027:9831
Hydrodynamic Forces on Multiple Circular Cylinders, Tokuo Yamamoto, HY9:Sept 76:1193: 12395
Laboratory Study of Energy Losses at Storm Sewer Junctions, Jan R. Prins and David R. Townsend, IR76:July 76:609
Viscoelastic Analysis About Deformation of Weak Ground, Tomoyuki Akagi, Yoshinori Ito and Makoto Irobe, NMG:June 76:II-639

Cofferdams
Construction of Grand Coulee Third Power Plant, Donald J. Duck, CO4:Dec 75:869:11774
Curved Diaphragm Cellular Cofferdams, Jerome J. Cushing and Robert M. Moline, GT10:Oct 75:1055: 11669
Difficult Dam Problems - - Cofferdam Failure, Harry E. Thomas, Eugene J. Miller and John J. Speaker, CE:Aug 75:66
Photoelastic Analysis of a Cofferdam, Naveed K. Burki and Rowland Richards, Jr., GT2:Feb 75:129: 11135

Cohesion
Recent Results in French Research on Reinforced Earth, Francois Schlosser and Nguyen-Thanh-Long, CO3:Sept 74:223:10800

Cohesionless Soils
Comparison of Methods for Liquefaction Evaluation, Julio E. Valera and Neville C. Donovan, Preprint No.2752, Sept 76, 30pp.
Elastoplastic Stress-Strain Theory for Cohesionless Soil, Poul V. Lade and James M. Duncan, GT10: Oct 75:1037:11670
Stress-Path Independent Behavior of Cohesionless Soil, Poul V. Lade and James M. Duncan, GT1:Jan 76:51:11841
Vibroflotation and Terra-Probe Comparison, Ralph E. Brown and Andrew J. Glenn, GT10:Oct 76:1059: 12498

Cohesive Soils
Analysis of a Test Embankment Considering the Anisotropy of the Soil, Hakan Stille, A. Fredriksson and Bengt B. Broms, NMG:June 76:II-611
End Effects on Stability of Cohesive Slopes, Mohsen M. Baligh and Amr S. Azzouz, GT11:Nov 75:1105: 11705
Finite Element Model for Cohesive Sediment Transport, Ranjan Ariathurai and Ray B. Krone, HY3:Mar 76:323:11987
Holding Capacity of Direct Embedment Anchors, Richard M. Beard and Homa J. Lee, OE75:June 75:470
In Situ Measurement of Soil Properties, Harvey E. Wahls, Chmn., GT75:June 75
Stability of Offshore Pipe in Cohesive Sediment, Osman I. Ghazzaly, Leland M. Kraft, Jr. and S. J. Lim, OE75:June 75:490
Undrained Volume Changes in Compacted Cohesive Soil, James L. Withiam and Fred H. Kulhawy, GT10:Oct 76:1029:12483

Cold Forgings
Axial Compression of Formed-Faced Sandwich Panels, Ken P. Chong, Pei-Chung Liu and Kjell Oistein Engen, Preprint No.2807, Sept 76, 22pp.
Literature Surveys of Cold-Formed Structures, Ken P. Chong, Chmn., Preprint No.2807, Sept 76, 59pp.
Survey of Current Research on Cold-Formed Structures, Shien T. Wang, Chmn., Preprint No.2807, Sept 76, 42pp.

Cold-Rolled Steel
Empirical Effective Width Formula, Niels C. Lind, Mayasandra K. Ravindra and Gerald Schorn, ST9: Sept 76:1741:12426
Inelastic Strength of Cold-Formed Steel Beams, H. Peter Reck, ST11:Nov 75:2193:11713
Limit States Basis for Cold-Formed Steel Design, Sree R. Parimi and Niels C. Lind, ST3:Mar 76:475: 12009
Local and Overall Buckling of Cold-Formed Members, John T. DeWolf, Teoman B. Pekoz and George Winter, ST10:Oct 74:2017:10875
Strain Hardening and Aging in Cold-Formed Steel, Kenneth W. Karren and Mahendrasinhji M. Gohil, ST1:Jan 75:187:11067
Utilization of Cold Work in Cold-Formed Steel, Niels C. Lind and Dilip K. Schroff, ST1:Jan 75:67:11043

Cold Weather Construction
Basic Construction Principles in Higher Latitudes, Shu-T'ien Li, CO1:Mar 74:33:10399
Construction of Large Prestressed Concrete Girders, J. Neil Mustard and Ram S. Ghosh, CO4:Dec 74: 507:10994
Deep Sea Construction, S. Samuel Doughty, CO3: Sept 75:607:11575
First Bridge Across the Yukon River, Lawrence Carlson, Roy C.J. Dreyer and Rodney Platzke, CE: Aug 76:47
A Half-Century of Cold-Regions Construction, F. Lawrence Bennett, CO4:Dec 75:839:11780
Liquefaction Criteria for the Trans-Alaska Pipeline, Neville C. Donovan and Sukhmander Singh, Preprint No.2752, Sept 76, 30pp.
Marseilles Lock Rehabilitation: Illinois Waterway, James P. Jones and Ralph E. Houck, WW76:Aug 76:249
Materials and Specification for Marine Structures, D. L. Frisby, OE75:June 75:818
Northern Off-Road Transportation in the 70's, I. A. Thomas, CO3:Sept 75:635:11573
Passage of Ice at Hydraulic Structures, Darryl J. Calkins and George D. Ashton, WW76:Aug 76: 1726
Seasonal Effects on Building Construction, David Morris, CO1:Mar 76:29:11989
Steel Frame, Precast Floors Meet Impossible Time Constraints, Arthur B. Andersen, CE:Feb 76:54
Yukon River to Prudhoe Bay Highway — Lessons in Arctic Design and Construction, James F. McPhail, William B. McMullen and Allan W. Murfitt, CE: Feb 76:78

Cold Weather Operations
Arctic Refraction Study, Gerald W. Johnson, SU1: Dec 76:1:12602
First Bridge Across the Yukon River, Lawrence Carlson, Roy C.J. Dreyer and Rodney Platzke, CE: Aug 76:47
Ice Removal From the Walls of Navigation Locks, Guenther E. Frankenstein, James L. Wuebben, H. H.G. Jellinek and R. Yokota, WW76:Aug 76:1487
A Model Study of St. Marys River Ice Navigation, James E. Cowley, J. W. Hayden and William W. Willis, WW76:Aug 76:1610
Off-Highway Transportation in the Arctic, Arthur D. Anderson, CE:Mar 76:72
Passage of Ice at Hydraulic Structures, Darryl J. Calkins and George D. Ashton, WW76:Aug 76: 1726

Cold Working
Behavior of Cold-Rolled Stainless Steel Members, Shien T. Wang, Samuel J. Errera and George Winter, ST11:Nov 75:2337:11724
Utilization of Cold Work in Cold-Formed Steel, Niels C. Lind and Dilip K. Schroff, ST1:Jan 75:67:11043

Coliform Bacteria
Predicting Material Transportation in Mobile Bay, Gary C. April, Samuel Ng, Hua-An Liu and Donald O. Hill, DIEE:Jan 76:833

Coliforms
Shooting Models for Salinity and Coliform, Benjamin J. Olufeagba and Robert H. Flake, EE1:Feb 76:95: 11939
Upflow Filter for Potable Water Production, Ben J. Haney and Stephen E. Steimle, EE4:Aug 75:489: 11511

Collapse
Bailey's Crossroads: A/E Liability Test, Virginia Fairweather, CE:Nov 75:58
Case History — Problems in Obtaining Repairs to Barber Dam, A. Kenneth Dunn, EFRLD:Sept 75:93
Collapse Load Analysis of Frames Considering Axial Forces, M. Z. Cohn and Tariq Rafay, EM4:Aug 74: 773:10757
Collapse of Curved Reinforced Concrete Beams, Ian J. Jordaan, Magdi M. A. Khalifa and Arthur E. McMullen, ST11:Nov 74:2255:10951
Collapsible Soils, John P. Bara, Preprint No.2797, Sept 76, 12pp.
Elastoplastic Analysis of Coupled Shear Walls, Kumarapillai K. Nayar and Alexander Coull, ST9: Sept 76:1845:12401
Frame Collapse Using Tangent Stiffness, William Tranberg, Peter Swannell and John L. Meek, ST3: Mar 76:659:11979
Half a Century of Soil Mechanics—Some Thoughts for the Future in the Light of the Past, Gregory P. Tschebotarioff, EI3:July 76:321:12251
Limit Design of Folded Plate Structures, Morris N. Fialkow, ST76:Aug 76:222
Plastic Collapse of Folded Plate Structures, Morris N. Fialkow, ST7:July 75:1559:11465
Plasticity and Some of Its Corollaries in Soil Mechanics. Collapse and Continuing Deformation Under Load Repetition, Olgierd C. Zienkiewicz, NMG:June 76:III-1275
Structural Failures and How to Prevent Them, Dov Kaminetzky, CE:Aug 76:60
Structural Fire Resistance of Concrete, Eduardo Salse and Tung D. Lin, ST1:Jan 76:51:11835

Collective Bargaining
Comparision of Construction Labor Agreements, Neal B.H. Benjamin and Arthur W. Young, CO1: Mar 75:183:11180
The Making of a "Pro"—A Faculty Viewpoint, Dan H. Pletta, EI3:July 74:217:10645

Collingwood Prize
1976 Collingwood Prize Presented to John T. Novak and Gail E. Montgomery, CE:Oct 76:101

Collision Avoidance
Progress in Signaling for Track Guided Systems, Alastair D. McAulay, TE4:Nov 75:621:11695

Colluvium
Collapsible Soils, John P. Bara, Preprint No.2797, Sept 76, 12pp.

Colombia
Planning Pedestrian Systems for a Prototype New Town in Colombia, John B. Frazier, BP75:Dec 75: 245
8-Story Building Moved to Avoid Wrecker's Ball, Antonio Paez Restropo, CE:June 75:62

Color
The Color of Structures, Clayford T. Grimm, ST9: Sept 75:1871:11547

Colorado
Case Study of Carless Mobility Constraints, K. C. Koutsopoulos and Vasant H. Surti, TE4:Nov 76: 745:12566
Construction of Pueblo Dam, John W. Larson, CO4: Dec 75:883:11769
Highway in Harmony with Its Environment, Cade L. Benson, CE:Sept 76:56
Irrigation Research to Practice in Grand Valley, Gaylord V. Skogerboe, Wynn R. Walker and Robert G. Evans, IR76:July 76:19
Issues and Answers in Bikeway System Development, Larry L. Lucero, BP75:Dec 75:54
I-70 Glenwood Canyon — Design Concept, Joseph H. Looper, TE2:May 76:201:12138
Response of South Platte to Effluent Limitations, David W. Hendricks and Mark H. Bluestein, EE4: Aug 76:745:12294

Colorado River
Salinity Control and Federal Water Quality Act, Michael B. Bessler and John T. Maletic, HY5:May 75:581:11321
Salinity Policy for Colorado River Basin, Gaylord V. Skogerboe and Wynn R. Walker, HY8:Aug 75: 1067:11510
Significance of Water Quality to Water Resources, Vernon E. Valantine, Preprint No.2673, Apr 76, 13pp.
A Stochastic Approach to the Colorado River Basin, William L. Lane, Albert E. Gibbs and Robert B. Main, Preprint No.2684, Apr 76, 26pp.
Utilization and Control of Rivers in the Southwest, George A. Whetstone, WW76:Aug 76:1149
Water Available for Energy—Upper Colorado River Basin, Dee C. Hansen, WR2:Nov 76:341:12573

Color Perception
The Color of Structures, Clayford T. Grimm, ST9: Sept 75:1871:11547

Color Reactions
The Color of Structures, Clayford T. Grimm, ST9: Sept 75:1871:11547

Columbia River
Construction of the 40-Foot Channel in Columbia River, Robert O. Dodge, WW76:Aug 76:259
Simulation of Future River Fluctuations, Douglas D. Speers, WW76:Aug 76:608
Water and Electric Power in the Pacific Northwest, Fred A. Limpert, EFEEC:Aug 75:80

Columns
Ferrocement—Behavior in Tension and Compression, Colin D. Johnston and Samir G. Mattar, ST5:May 76:875:12104

Columns (Process Engineering)
Column Settling Tests for Flocculant Suspensions, Alphonse E. Zanoni and Marshall W. Blomquist, EE3:June 75:309:11356

Columns (Supports)
Accuracy of Some Numerical Methods for Column Buckling, Paul Seide, EM5:Oct 75:549:11607
Axial Compression of Formed-Faced Sandwich Panels, Ken P. Chong, Pei-Chung Liu and Kjell Oistein Engen, Preprint No.2807, Sept 76, 22pp.
Behavior of Fabricated Tubular Columns Under Biaxial Bending, Wai F. Chen and D. A. Ross, Preprint No.2659, Apr 76, 21pp.
Buckling of A Single-Crossarm Stayed Column, Raymond J. Smith, George T. McCaffrey and John S. Ellis, ST1:Jan 75:249:11071
Column Design by P Delta Method, Brian R. Wood, Denis Beaulieu and Peter F. Adams, ST2:Feb 76: 411:11936
Column Supported Cylindrical-Conical Tanks, Phillip L. Gould, Subir K. Sen, Robert S.C. Wang, Herman Suryoutomo and Richard D. Lowrey, ST2:Feb 76: 429:11927
Concrete Encased Steel Columns—Design Tables, Richard W. Furlong, ST9:Sept 74:1865:10807
Continuum Method for Overall Stability of Tall Asymmetric Buildings, Ari Danay, Menachem Gellert and Jacob Gluck, ST12:Dec 75:2505:11761
Design Applications: The SSRC Guide, Third Edition, Bruce G. Johnston, Preprint No.2802, Sept 76, 33pp.

Design Criteria for H-Columns under Biaxial Loading, Negussie Tebedge and Wai F. Chen, ST3: Mar 74:579:10400
Design of Columns Subject to Biaxial Bending, John Springfield, Preprint No.2750, Sept 76, 21pp.
Design of I-Shaped Columns with Diaphragm Bracing, Samuel J. Errera and Tamirisa V.S.R. Apparao, ST9:Sept 76:1685:12397
Determination of the Missile Load for Steel Columns of a Nuclear Power Plant Structure, Zin-Tsai Shi, STN75:Dec 75:II-29
Diaphragm Braced Members and Design of Wall Studs, Amir Simaan and Teoman B. Pekoz, ST1:Jan 76:77:11851
Effective Column Length in Polygon Shaped Frames, Kuang-Han Chu and Robert H. Rampetsreiter, TN: ST8:Aug 76:1629:12288
Elastic Stability of Polygon Folded Plate Columns, R. Richard Avent and James H. Robinson, Jr., ST5: May 76:1015:12108
Elements of Steel Structures — History, State-of-the-Art, and Potential Developments: Columns, Reidar Bjorhovde, Preprint No.2786, Sept 76, 24pp.
Evaluation of Resonant Column Test Devices, George R. Skoglund, William F. Marcuson, III and Robert W. Cunny, GT11:Nov 76:1147:12567
Further Aspects of Design by PΔ Model, Brian R. Wood, Denis Beaulieu and Peter F. Adams, ST3: Mar 76:487:11973
High Rise Building Column Design, Jerome S.B. Iffland, Preprint No.2740, Sept 76, 28pp.
Hi-Rise in Wood, Frank Horner, Preprint No.2798, Sept 76, 8pp.
Inelastic Cycles of Axially Loaded Steel Members, Lawrence F. Kahn and Robert D. Hanson, ST5: May 76:947:12111
Interactive Computer Design of Reinforced Concrete Beams and Columns, Melvin R. Ramey, Preprint No.2737, Sept 76
Interactive Nonlinear Structural Analysis, Howard B. Harrison, ST7:July 76:1353:12235
Kansas City Bank Tower Features Water-Filled Columns, Exposed Spandrels, CE:Jan 76:58
Local and Overall Buckling of Cold-Formed Members, John T. DeWolf, Teoman B. Pekoz and George Winter, ST10:Oct 74:2017:10875
Local Buckling of Tubular Steel Columns, Alexis Ostapenko and Stephen X. Gunzelman, ST76:Aug 76:549
Model of Interactive Buckling of Stiffened Plates, James G.A. Croll, EM5:Oct 75:575:11622
Providing the Profession with Design Programs, Eddie Y.L. Chien and Michael I. Gilmor, EI2:Apr 75:165:11261
Response of a Column in Random Vibration Tests, Gene K. Baxter and Ross M. Evan-Iwanowski, ST9:Sept 75:1749:11568
The Safety of Structural Steel Columns, Reidar Bjorhovde, Preprint No.2809, Sept 76, 27pp.
Some Effects of Dynamic Soil Properties on Soil-Structure Interaction, Frank E. Richart, Jr., GT12: Dec 75:1193:11764
Strength Decay of RC Columns under Shear Reversals, James K. Wight and Mete A. Sozen, ST5:May 75:1053:11311
Strength of Slab-Column Connections with Shear and Unbalanced Flexure, Robert Park and Shafiqul Islam, ST9:Sept 76:1879:12419
Subassemblage Concept for Tall Frame Analysis, Graham H. Powell and M. Bassam El Hafez, ST8: Aug 74:1611:10739
Tests and Analysis of Beam-to-Column Web Connections, Wai F. Chen and Glenn P. Rentschler, ST76:Aug 76:957
Tests on Slab-Column Connections with Shear and Unbalanced Flexure, Shafiqul Islam and Robert Park, ST3:Mar 76:549:11972
Unstiffened Compression Elements, V. Kalyanaraman, Teoman B. Pekoz and George Winter, Preprint No.2807, Sept 76, 38pp.

Combined Sewers

Automatic Control of Large-Scale Combined Sewer Systems, John W. Labadie, Neil S. Grigg and Bruce M. Bradford, EE1:Feb 75:27:11115
Equalization of Flow Variations in Combined Sewers, Lars-Eric Janson, Stein Bendixen and Anders Harlaut, EE6:Dec 76:1139:12596
Pollutional Analysis of Combined Sewer Systems, Oddvar Georg Lindholm, EE2:Apr 76:301:12030
Stormwater Studies and Alternatives in Atlanta, Robert F. Holbrook, Armando I. Perez, Billy G. Turner and Herbert I. Miller, EE6:Dec 76:1263: 12614
Urban Runoff Pollution Control—State-of-the-Art, Richard Field and John A. Lager, EE1:Feb 75:107: 11129

Combined Stress

Buckling of Web Plates under Combined Loadings, Mohammed Z. Khan and Kenneth C. Johns, ST10: Oct 75:2079:11619
Prestressed Box Beams under Combined Loading, David W. Johnston and Paul Zia, ST7:July 75:1313: 11421

Combustion

Air Pollution Impact of Railroad Electrification, Hal B.H. Cooper, Jr., Hoy A. Richards and Aaron T.B. Lam, EE4:Aug 76:723:12312

Commerce

Bikes and Malls, Harold Katner, BP75:Dec 75:4
Skyways in Minneapolis/St. Paul: Prototypes for the Nation?, C. Todd Heglund and Richard C. Podolske, BP75:Dec 75:482

Common Carriers

Competition in the Transportation Industry, Dayle M. Clark and James J. Schwarzwalder, TE3:Aug 76:489:12290

Communication

Communication Goals for Science and Engineering, S. H. Wittwer, EI2:Apr 76:183:12087
A Communications Project — D/FW Airport, Jack D. Downey, EFAN:Dec 74:168
The Engineer's Response to Nonengineering Criticism of His Professional Work, John E. Spitko, Jr., EI1:Jan 75:1:11062
Motivating Students Towards Professional Thinking, Joseph M. DeSalvo, EI1:Jan 75:47:11081
Requirements of Professional Practice, David Novick, EI2:Apr 76:193:12086
Summary — Case Study of Dallas/Fort Worth Airport, Jack D. Downey, EFAN:Dec 74:165

Community Development

Community Development Implications of Energy Complex Construction, C. R. Cavanagh, EFEEC: Aug 75:280
Interaction Relationship of Community Development with Government Programs, John J. Wilder, EI4: Oct 76:471:12502

Community Planning

Genesee Expressway Corridor Analysis, Lawrence H. Lehman, Robert J. Trapani and Philip A. Habib, TE4:Nov 75:781:11726

Community Relations

Community Development Implications of Energy Complex Construction, C. R. Cavanagh, EFEEC: Aug 75:280
Public Participation and Energy Complexes: An Overview, Benjamin C. Dysart, III, EFEEC:Aug 75:365

Community Support

Community Acceptance of Highway Corridor Development, Douglas Nunn, EI3:July 75:337: 11414
Public Acceptance of New Mass Transit System, Roger B. Trent and Cooper N. Redwine, UP1:Aug 76:225:12361

Commuting Patterns
The Impact of Office Space and Parking Distribution on Commuter Modal Choice, Joseph J. McCourt and William C. Miller, Preprint No.2790, Sept 76, 26pp.

Compacted Soils
Bending Test for Compacted Clays, Arif Ajaz and Richard H.G. Parry, GT9:Sept 76:929:12404

Compacting
Fifty-Year Developments in High Strength Concrete, Colin D. Johnston, CO4:Dec 75:801:11757
New and Conventional Engineering Uses of Fly Ash, Ramesh C. Joshi, Donald M. Duncan and Howard M. McMaster, TE4:Nov 75:791:11730
Some Construction Aspects of Tarbela Dam, Morgan H. Thompson, CO3:Sept 74:247:10799

Compaction
Constitutive Laws for Sand in Dynamic Shear, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, NMG:June 76:I-270
Hydraulic Dredge Spoil for Land Reclamation, Carl W. Garbe and Kuei-wu Tsai, Preprint No.2678, Apr 76, 24pp.
Massive Compaction of Granular Soil — How We Stand, Henry W. Janes and Robert D. Anderson, Preprint No.2777, Sept 76, 28pp.
Planning and Performing Compaction Grouting, James Warner and Douglas R. Brown, GT6:June 74:653:10606
Underwater Placement of Sand Fill at Port of Portland Terminal #6, Loren R. Anderson and John Ramage, Preprint No.2718, Apr 76, 20pp.
Undrained Volume Changes in Compacted Cohesive Soil, James L. Withiam and Fred H. Kulhawy, GT10:Oct 76:1029:12483
Vibroflotation and Terra-Probe Comparison, Ralph E. Brown and Andrew J. Glenn, GT10:Oct 76:1059:12498
Vibroflotation Compaction of Granular Hydraulic Fills, Ralph E. Brown, Preprint No.2657, Apr 76, 30pp.

Compaction Tests
Consolidation of Fibrous Peat, Peter L. Berry and Brian Vickers, GT8:Aug 75:741:11493

Comparative Studies
Measuring Transportation System Performance, Thomas R. Mongan, N. J. Nielsen and J. R. Formby, TE3:Aug 75:437:11483

Compatibility
Use of Space in Highway Impact Zone, Floyd I. Thiel, Roger D. Mingo and Jo Ann Fields, TE4:Nov 76:727:12539

Competition
Competition in the Transportation Industry, Dayle M. Clark and James J. Schwarzwalder, TE3:Aug 76:489:12290
On Bidding—A Dynamic Model with One Competitor, Fletcher H. Griffis, Preprint No.2709, Apr 76, 28pp.

Competitive Bidding
ASCE's Current Position on Competitive Bidding, CE:Jan 76:88
Competitive Alternative to Minority Quotas/Goals, Jerome R. Butler, Jr. and Doug Hunt, CE:Sept 75:104
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., Preprint No.2643, Apr 76, 10pp.
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., CO4:Dec 76:587:12600

Complexity
Logical Complexity in Engineering Specifications, Jimmy L. Noland, ST76:Aug 76:761

Compliance Tests
Statistical Variation of the Compliance of Coal, Richard Henry Atkinson and Hon-Yim Ko, NMG:June 76:I-367

Composite Beams
Composite Steel-Concrete Construction, Ivan M. Viest, Chmn., ST5:May 74:1085:10561
Effective Composite Beam Width at Ultimate Load, Conrad P. Heins and Horn Ming Fan, ST11:Nov 76:2163:12538
Plastic Rotations in Continuous Encased Beams, Subhash Chandra Maiti, ST6:June 75:1269:11375
Prestressed Composite Continuous Bridge Girder, Subhash C. Anand and Clarence J. Fennell, III, TN: ST1:Jan 76:313:11821

Composite Fabrication
Buckling of Composite Beams in Negative Bending, Sumio Hamada and Jack Longworth, ST11:Nov 74:2205:10917
Composite Construction Methods, John P. Cook, CO1:Mar 76:21:11975

Composite Materials
Axisymmetrical Deformation of Bimodulus Orthotropic Circular Cylindrical Shell, Norio Kamiya, EM1:Feb 76:89:11916
Composite Steel-Concrete Construction, Ivan M. Viest, Chmn., ST5:May 74:1085:10561
Nonlinear Analysis of Unsymmetrically Laminated Plates, Samir A. Zaghloul and John B. Kennedy, EM3:June 75:169:11345

Composite Structures
Analysis of Buried Pipe Under Embankment, Shamsher Prakash, Gyan C. Nayak and R. Gupta, NMG:June 76:II-886
Analysis of Reinforced Fibrous Concrete Beams, Charles H. Henager and Terrence J. Doherty, ST1:Jan 76:177:11847
Composite Connections to External Columns, Peter Ansourian and Jack William Roderick, ST8:Aug 76:1609:12320
Composite Construction Methods, John P. Cook, CO1:Mar 76:21:11975
Composite Steel-Concrete Construction, Ivan M. Viest, Chmn., ST5:May 74:1085:10561
Composite Steel-Deck Concrete Floor Systems, Reinhold M. Schuster, ST5:May 76:899:12116
Concrete Encased Steel Columns—Design Tables, Richard W. Furlong, ST9:Sept 74:1865:10807
Design Recommendations for Steel Deck Floor Slabs, Max L. Porter and Carl E. Ekberg, Jr., ST11:Nov 76:2121:12528
Finite Element Analysis of Layered Wood Systems, Erik G. Thompson, James R. Goodman and M. Daniel Vanderbilt, ST12:Dec 75:2659:11802
Finite Element Analysis of Wood-Stud Walls, Anton Polensek, ST7:July 76:1317:12234
Full Range Analysis of Eccentrically Stiffened Plates, Anton W. Wegmuller, ST1:Jan 74:143:10286
Generalisation of Sequential Nonlinear Analysis: A Study of Rockfill Dam with Joint Elements, Heramb D. Sharma, Gyan C. Nayak and J. B. Maheshwari, NMG:June 76:II-662
Integrated Study of Reinforced Earth-I: Theoretical Formulation, Karl M. Romstad, Leonard R. Herrmann and Chih-Kang Shen, GT5:May 76:457:12144
Modal Analysis for Impact of Layered Plates, James T. Kubo and Richard B. Nelson, EM1:Feb 75:45:11133
Recent Japanese Developments in Mixed Structures, Minoru Wakabayashi, ST76:Aug 76:497
Shear-Bond Analysis of Steel-Deck-Reinforced Slabs, Max L. Porter, Carl E. Ekberg, Jr., Lowell F. Greimann and Hotten A. Elleby, ST12:Dec 76:2255:12611
Shear Lag in Shallow Wide-Flanged Box Girders, Karl Van Dalen and Sanivarapu V. Narasimham, ST10:Oct 76:1969:12449
Thermal Stress as a Narrow-Band Random Load, Robert A. Heller, EM5:Oct 76:787:12450

Ultimate Live Load Distribution Factor for Bridges, Conrad P. Heins and John T.C. Kuo, ST7:July 75: 1481:11443
Ultimate Strength of Continuous Composite Beams, Sumio Hamada and Jack Longworth, ST7:July 76: 1463:12267

Composition
Principles of Composition in Building Art, Clayford T. Grimm, ST9:Sept 75:1739:11544

Compressibility
Compressibility of Undisturbed Submarine Sediments, William F. Brumund and Gordon W. Callender, Jr., OE75:June 75:363

Compression
Bending Test for Compacted Clays, Arif Ajaz and Richard H.G. Parry, GT9:Sept 76:929:12404

Compression Members
Nonlinear Cable and Frame Interaction, Kuang-Han Chu and David Chia-Chiun Ma, ST3:Mar 76:569: 12008
Unstiffened Compression Elements, V. Kalyanaraman, Teoman B. Pekoz and George Winter, Preprint No.2807, Sept 76, 38pp.

Compression Ratio
Engineering Behavior of Calcareous Clays, Vito A. Nacci, Mian-Chang Wang and Kenneth R. Demars, OE75:June 75:380

Compressive Strength
Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, Preprint No.2702, Apr 76, 30pp.
Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, WW4:Nov 76:455: 12561

Computation
Anisotropy and Stress Reorientation in Clay Under Load, Hideki Ohta and C. Peter Wroth, NMG:June 76:I-319
Calculation of Steel Diaphragm Behavior, J. Michael Davies, ST7:July 76:1411:12254
Calculations to Test a Pack Ice Model, Max D. Coon, Roger Colony, Robert S. Pritchard and D. A. Rothrock, NMG:June 76:II-1210
Comparison of Numerical Schemes, John C. Bruch, Jr. and Roland W. Lewis, NMG:June 76:I-115
Computation of Seismic Induced Flow Landslide, Hung Tao Shen and Wen Huang, NMG:June 76:II-1054
Computation of Tidal Flow in Well-Mixed Estuaries, Carl E. Pearson and Donald F. Winter, HY3:Mar 76:367:11990
A Difference Scheme for the AIDJEX Sea Ice Model, Robert S. Pritchard and Roger Colony, NMG:June 76:II-1194
Dimensionless Solution of Dam-Break Flood Waves, John G. Sakkas and Theodor Strelkoff, HY2:Feb 76:171:11910
Discharge Computations at River Control Structures, Dannie L. Collins, HY7:July 76:845:12237
Interactive Nonlinear Structural Analysis, Howard B. Harrison, ST7:July 76:1353:12235
Iterative Improvement of Finite Element Approximations, Ranbir S. Sandhu, U. Salaam and K. J. Singh, NMG:June 76:I-104
Non-Linear Flow and Deformation Analysis of Consolidated Problems, Roland W. Lewis, G. W. Roberts and Olgierd C. Zienkiewicz, NMG:June 76:II-1106
Numerical Computation of Two-Dimensional Flows, John P. Grubert, WW1:Feb 76:1:11891
Numerical Computation of Well-Mixed Estuarine Flows, John P. Grubert, HY7:July 76:955:12255
On the Accuracy of the Solution of Finite Element Equilibrium Equations, Klaus-Jurgen Bathe, NMG: June 76:I-82
Optimization of Long-Span Cold-Formed Truss Purlins, Richard T. Douty and James O. Crooker, ST11:Nov 74:2275:10952
Parametric Studies as a Design Aid in Tunneling, K. Kovari, H. Hagedorn and P. Fritz, NMG:June 76: II-773
Response of Footings on Micaceous, Cohesionless Soils, Jean M.E. Audibert, Nabil F. Ismael and G. Wayne Clough, NMG:June 76:I-567
Sequential Deterministic Optimization in Reservoir Operation, Thomas E. Croley, II, HY3:Mar 74:443: 10426
Some Finite Element Solutions in the Dynamics of Circular Footings, S. P. Dasgupta and N. S.V. Kameswara Rao, NMG:June 76:II-1038
Stress and Stability Analyses of Underground Openings Taking Post-Failure Behavior of Rock into Consideration, T. Kawamoto and T. Saito, NMG:June 76:II-791
Stresses in Soils due to Vertical Load on Piles, Verendra Singh, NMG:June 76:I-451
Three-Dimensional Analysis of Vertical Pile Groups, Prasanta K. Banerjee and Richard M. Driscoll, NMG:June 76:I-438
Time-Reversed Unsteady Flow Computations in Waterways, Hsiao-Ling Chu, WW76:Aug 76:1535
Variational Principles for Finite Element Analysis of Consolidation, Ranbir S. Sandhu, NMG:June 76:I-20
Viscoelastic Analysis About Deformation of Weak Ground, Tomoyuki Akagi, Yoshinori Ito and Makoto Irobe, NMG:June 76:II-639
Viscoplastic Constitutive Matrix Corresponding to the Hyperbolic Sine Creep Law, Guenter W. Borm, NMG:June 76:I-357
Water Hammer in Coaxial Pipe Systems, Werner Burmann, HY6:June 75:699:11374

Computer Applications
AISC Code Compliance Provisions of ICES STRUDL-II, Michael G. Samuchin, ST76:Aug 76: 756
An Algorithm for Route Deviation Service, Stanley T.L. Lung and Wilfred W. Recker, TE1:Feb 76:161: 11931
Behavior of Prestressed Cable Truss Structures, Dwight E. Urelius and David W. Fowler, ST8:Aug 74:1627:10747
Can a Computer Reduce Your Spec Writing Costs?, Carter H. Harrison, Jr., CE:Apr 76:80
Chow's General Hydrologic Model, Fazal H. Chaudhry, Maria A. Simoes and Walter M. Ferreira Filho, TN: HY9:Sept 76:1387:12368
Computer-Aided Design: Toward an Optimal Design of Concrete Structures, Yogindra N. Anand, Edward J. Rhomberg and Constancio F. Miranda, ST76:Aug 76:1060
Computer-Aided Structural Analysis and Design of the 37-Story Bonaventure Hotel, Joseph P. Nicoletti, Dilip P. Jhaveri and Leroy Z. Emkin, ST76:Aug 76:796
Computer-Based Technology Transfer, Roberta H. Ewald, Charles H. Goodspeed, Richard A. Jones, Robert R. Smith, Daniel R. Rehak, John G. Voreades and Ben Y.C. Wong, EI2:Apr 75:175: 11228
Computer Graphics, Treatment for the Terminal Illness, H. N. Christiansen, Preprint No.2765, Sept 76, 20pp.
Computer Input/Output Methods Useful for Engineers, Phoebe A. Miller and Barry A. Scott, ST76:Aug 76:851
The Computer in Shell Stability Analysis, Bo O. Almroth and James H. Starnes, EM6:Dec 75:873: 11811
Computerized Analysis of Rock Slope Stability, David S. Campbell, John T. Christian and Herbert H. Einstein, GT76:Aug 76:415
Computerized Traffic Signals; Good for My City?, Kneeland A. Godfrey, Jr., CE:Nov 75:76
Computer Location of Bikeways, William L. Smith and Jerry S. Murphy, BP75:Dec 75:66
Computer Pricing Policy and Methods, Norman R. Greve, Chmn., EI4:Oct 76:437:12505

Computer Use for River Regulation, Charles E. Abraham, HY2:Feb 75:291:11140
Conventional Versus Integrated Courses in Structural Analysis and Design, William G. Murphy and William J. Hall, ST76:Aug 76:997
Design of Storm Sewer Networks, Ben Chie Yen and Ahmet Suha Sevuk, EE4:Aug 75:535:11503
Effects of Irrigation Scheduling and Coordinated Delivery on Irrigation and Drainage Systems, Roy D. Gear, Arnold S. Dransfield and Melvin D. Campbell, Preprint No.2720, Apr 76, 18pp.
Elastic and Elasto-Plastic Computerized Dynamic Analysis of Frame Structures Subjected to Blast Overpressure, George S. Tseng, William Stea, Samuel Weissman, Norval Dobbs and Paul Price, ST76:Aug 76:977
The Engineering Computer Revolution—Over or Just Beginning, David E. Wojick, EI3:July 76:351:12276
Engineering Surveying: Chapters 2, 5, 6, 8, 16, and 20, George M. Mayfield, Chmn., SU1:Dec 76:59:12648
Evaluation of Friction Slope Models, Joseph R. Reed and Albert J. Wolfkill, WW76:Aug 76:1159
Experience with Computer-Aided Drafting System, Geoffrey M.J. Williams, ST4:Apr 75:649:11224
FE Analysis of Soil Movements Below a Test Embankment, Toru Shibata, Masanari Tominaga and Hajime Matsuoka, NMG:June 76:II-599
Finite Element Analysis of Linear Dynamic Behavior, John S. Archer, Preprint No.2765, Sept 76, 30pp.
Flood Control Arrangements for River Junctions, Mostafa M. Soliman, WW76:Aug 76:1057
Free-Form Arch Dam Design System, Walter Stensch and G. Gerry, ST4:Apr 75:795:11222
The History of Computers — A Vendor's View, Vincent J. Vitagliano, Preprint No.2759, Sept 76, 22pp.
New Methods in Construction Systems, R. Richard LeVitt, CO3:Sept 74:211:10788
Optimum Frame Design Using Available Sections, Kuan-Chen Fu and Kuang-Wei You, ST76:Aug 76:1049
Practical Applications of the Mini Computer to Structure in Railway Maintenance Programs, Noam Eimer and Richard A. Teichman, Jr., ST76:Aug 76:675
Response to Stochastic Wind of N-Degree Tall Buildings, William E. Saul, P. Jayachandran and Alain H. Peyrot, ST5:May 76:1059:12112
Session 6: Soil Structure Interaction — Design and Analysis, Asadour H. Hadjian, STN75:Dec 75:II-191
Session 6: Soil Structure Interaction — Wave Propagation, Carl J. Costantino, STN75:Dec 75:II-203
Sparse Matrix Operations in Finite Element Analysis, Caleb W. McCormick, Preprint No.2765, Sept 76, 20pp.
Stability of Slopes by Logarithmic-Spiral Method, Yang H. Huang and Craig M. Avery, GT1:Jan 76:41:11838
Subsurface Drainage Solutions by Galerkin's Method, Purushottam Dass and Hubert J. Morel-Seytoux, IR1:Mar 74:1:10397
The Systems Approach and Construction Management, Stanley Goldhaber, PROD:Aug 76:71
Teaching Structural Analysis and Design Using Computers, Oktay Ural, Preprint No.2737, Sept 76, 8pp.
Tension Leg Platforms: Design and Performance, Dean A. Kypke and Leonardo Perez y Perez, Preprint No.2698, Apr 76, 30pp.
Three-Dimensional FE Analysis of a Room and Pillar Coal Mine (A Comparison with Experiment), Robert T. Langland, NMG:June 76:II-802
Use of Finite Element Analyses for Railcar Design, Michael J. Dennis, TE1:Feb 76:105:11921
User Documentation for Engineering Software, James P. Cassidy, Norman R. Greve and Douglas F. Burnside, ST76:Aug 76:884
Wheel Load Stress Concentrations on Crane Runway Girders, G. J.K. Asmis, ST76:Aug 76:1005

Computer Graphics

Automated Analysis of Standard Buildings, Norman R. Maham, ST4:Apr 75:751:11265
Computer Cartography Offers County Unlimited Combinations and Considerable Savings, Vern Cartwright and Joseph P. Alessandri, CE:Nov 76:60
Computer Graphics, Treatment for the Terminal Illness, H. N. Christiansen, Preprint No.2765, Sept 76, 20pp.
The CRT Computer-Graphics Terminal: Indispensible Design-Aid for Some Structural Engineers, Eugene E. Dallaire, CE:Feb 76:47
Evaluation of Automatic Cartographic Systems for Engineering Mapping Functions, Antonio M. Aguilar, SU1:Oct 75:17:11625
The State-of-the-Art of Computer Graphics Applications in Structural Engineering, Robert D. Logcher, Chmn., ST3:Mar 75:459:11158

Computerized Design

The CRT Computer-Graphics Terminal: Indispensible Design-Aid for Some Structural Engineers, Eugene E. Dallaire, CE:Feb 76:47
Interactive Computer Design of Reinforced Concrete Beams and Columns, Melvin R. Ramey, Preprint No.2737, Sept 76
Practical Applications of Structural Optimization, George G. Goble and Fred Moses, ST4:Apr 75:635:11267
Systematic Substructuring, Senol Utku, ST4:Apr 75:717:11244

Computerized Records Management

Missouri River Computerized Data Bank, Glendon T. Stevens, Jr. and Bob Pierce, WW76:Aug 76:725

Computerized Simulation

Computer Modeling and Testing of Timber Trusses for Design Instruction, Louis H. Klotz, Preprint No.2737, Sept 76, 30pp.
Computer Simulation of Water Distribution Networks, Claude R. Gagnon and Samuel L.S. Jacoby, TE3:Aug 75:553:11315
Optimal Sizing of Urban Flood-Control Systems, Darryl W. Davis, HY8:Aug 75:1077:11490
Planning Pedestrian Environments — A Computer Simulation Model, William Boles, BP75:Dec 75:224
Response of South Platte to Effluent Limitations, David W. Hendricks and Mark H. Bluestein, EE4:Aug 76:745:12294
Simulation of the Stress Computation in Shells, M. Salama and Senol Utku, Preprint No.2737, Sept 76, 32pp.
Solid Particle Settlement in Open-Channel Flow, Ruh-Ming Li and Hsieh W. Shen, HY7:July 75:917:11460

Computer Languages

Software: Internal Maintenance Documentation, David M. Jubenville, Elizabeth Heinze and Robert L. Schiffman, ST76:Aug 76:903

Computer Logic

Specifications for Internal Programming Logic, Paul D. Barclay, ST76:Aug 76:869

Computer Models

Chow's General Hydrologic Model, Fazal H. Chaudhry, Maria A. Simoes and Walter M. Ferreira Filho, TN: HY9:Sept 76:1387:12368
Computer Modeling and Testing of Timber Trusses for Design Instruction, Louis H. Klotz, Preprint No.2737, Sept 76, 30pp.
Computer Modeling of Erodible Flood Channels and Deltas, Howard H. Chang and Joseph C. Hill, HY10:Oct 76:1461:12485
Conservation of Energy in Buildings, Vance L. Sailor, CO3:Sept 74:295:10795
CONSTRUCTO — An Interactive Gaming Environment, Daniel W. Halpin, CO1:Mar 76:145:11969
Cooled Seawater Discharge in Harbor Environment, Yuan Jen and Richard B. Dornhelm, OE75:June 75:1362

Environmental Data Management, George K. Young and G. F. Tierney, WR2:Nov 76:255:12559
Evaluation of Friction Slope Models, Joseph R. Reed and Albert J. Wolfkill, WW76:Aug 76:1159
Irrigation Return Flow Modeling for the Souris Loop, Richard W. Ribbens and Marvin J. Shaffer, IR76: July 76:545
Low Flow Modeling in Small Steep Watersheds, David S. Bowles and J. Paul Riley, HY9:Sept 76: 1225:12405
Missouri River Computerized Data Bank, Glendon T. Stevens, Jr. and Bob Pierce, WW76:Aug 76:725
Organizational Model for Design Specifications, Douglas J. Nyman and Steven J. Fenves, ST4:Apr 75:697:11227
Pipeline Corridor Selection Model Concept, Francis J. Stastny, TE2:May 75:337:11330
Planning Pedestrian Environments — A Computer Simulation Model, William Boles, BP75:Dec 75:224
Reaeration and Velocity Prediction for Small Streams, Edward G. Foree, EE5:Oct 76:937:12448
Salinity Induced Horizontal Estuarine Circulation, Brady A. Elliott and Robert O. Reid, WW4:Nov 76:425:12550
Simulation Model for Tunnel Construction Costs, Fred Moavenzadeh and Michael J. Markow, CO1: Mar 76:51:11967
Some Remarks on Computer Modeling of Coastal Flows, Hugo B. Fischer, WW4:Nov 76:395:12520
A Stochastic Approach to the Colorado River Basin, William L. Lane, Albert E. Gibbs and Robert B. Main, Preprint No.2684, Apr 76, 26pp.
Two-Dimensional Mathematical Water Quality Model, Brian J. Williams and Jon B. Hinwood, EE1:Feb 76:149:11947
Ultimate Strength of Tubular Beam-Columns, A. L. Wagner, W. H. Mueller and Hacik Erzurumlu, Preprint No.2695, Apr 76, 25pp.

Computer Printouts

Can a Computer Reduce Your Spec Writing Costs?, Carter H. Harrison, Jr., CE:Apr 76:80

Computer Programming

Automated Analysis of Standard Buildings, Norman R. Maham, ST4:Apr 75:751:11265
The CRT Computer-Graphics Terminal: Indispensible Design-Aid for Some Structural Engineers, Eugene E. Dallaire, CE:Feb 76:47
Efficient Finite Element Analysis of Seismic Structure-Soil-Structure Interaction, John Lysmer, H. Bolton Seed, T. Udaka, Richard N. Hwang and C.-F. Tsai, STN75:Dec 75:II-125
FAR — A Self-Teaching Frame Analysis Routine, Yehia Bahel-El-Din and Senol Utku, Preprint No.2737, Sept 76, 44pp.
Formal Representation of Design Requirements, Steven J. Fenves, ST76:Aug 76:739
Managing a Computer Program Development Project, A. Murray Lount, ST76:Aug 76:921
Practical Applications of the Mini Computer to Structure in Railway Maintenance Programs, Noam Eimer and Richard A. Teichman, Jr., ST76:Aug 76: 675
SEABERTH—A Program for the Calculation of Motions and Mooring Forces, Leonard Sugin and Ludwig H. Seidl, OE75:June 75:650
Software Coordination in Geotechnical Engineering, Robert L. Schiffman and David M. Jubenville, NMG:June 76:II-1228
Software: Internal Maintenance Documentation, David M. Jubenville, Elizabeth Heinze and Robert L. Schiffman, ST76:Aug 76:903
Specifications for Internal Programming Logic, Paul D. Barclay, ST76:Aug 76:869
Specifications for Successful Programming Projects, James L. Tocher, ST76:Aug 76:837
User Documentation for Engineering Software, James P. Cassidy, Norman R. Greve and Douglas F. Burnside, ST76:Aug 76:884

Computer Programs

Agricultural Benefit Assessment from Flood Control, Krishan P. Singh, IR76:July 76:264
Augmentation of 1968-1972 Winter Storms in New Mexico, Conrad G. Keyes, Jr., HY12:Dec 76:1725: 12616
Automated Analysis of Standard Buildings, Norman R. Maham, ST4:Apr 75:751:11265
Choice and Application of Computer Programs in Pipe Whip Analysis, Vera F. Dunder and Klaus-Jurgen Bathe, STN75:Dec 75:II-379
Computer-Aided Structural Analysis and Design of the 37-Story Bonaventure Hotel, Joseph P. Nicoletti, Dilip P. Jhaveri and Leroy Z. Emkin, ST76:Aug 76:796
Computer Analysis of Steel Frame in Fire, Wun-Chau Cheng and Cary K. Mak, ST4:Apr 75:854: 11262
Computer-Based Technology Transfer, Roberta H. Ewald, Charles H. Goodspeed, Richard A. Jones, Robert R. Smith, Daniel R. Rehak, John G. Voreades and Ben Y.C. Wong, EI2:Apr 75:175: 11228
Computer Usage and Pricing Alternatives for Consultants, Norman R. Greve, EI2:Apr 75:93: 11237
Efficient Finite Element Analysis of Seismic Structure-Soil-Structure Interaction, John Lysmer, H. Bolton Seed, T. Udaka, Richard N. Hwang and C.-F. Tsai, STN75:Dec 75:II-125
FAR — A Self-Teaching Frame Analysis Routine, Yehia Bahel-El-Din and Senol Utku, Preprint No.2737, Sept 76, 44pp.
A Heuristic Game for Material Selection in Structural Design Using the Hybrid Computer, Rick R. Evans, Subhash C. Anand and Myron Spector, Preprint No.2737, Sept 76, 25pp.
Irrigation Timetable Combined with Optimal Operating of an Agricultural Production System, Ilan Amir, Y. Friedman, S. Sharon and A. Ben David, IR76:July 76:192
Linear Structural Analysis of Multistory Buildings, R. Shankaran Nair, ST3:Mar 75:551:11163
Numerical Analysis of Embankments over Soft Soils, Robert L. Thoms, Richard A. Pecquet and Ara Arman, NMG:June 76:II-623
Numerical Errors in Water Profile Computation, Edward A. McBean and Frank E. Perkins, HY11: Nov 75:1389:11694
Numerical Solution of Unconfined Seepage Problems, W. D. Liam Finn and Erol Varoglu, NMG:June 76: III-1465
Ocean Wave Refraction Near Reykjavik, Iceland, Thorbjorn Karlsson and J. Eliasson, OE75:June 75: 1232
Pipeline Stress Analysis, Jamal J. Azar, John G. Bomba and Verle G. Randolph, TE1:Feb 75:163: 11122
Practical Applications of the Mini Computer to Structure in Railway Maintenance Programs, Noam Eimer and Richard A. Teichman, Jr., ST76:Aug 76: 675
Providing the Profession with Design Programs, Eddie Y.L. Chien and Michael I. Gilmor, EI2:Apr 75:165:11261
SEABERTH—A Program for the Calculation of Motions and Mooring Forces, Leonard Sugin and Ludwig H. Seidl, OE75:June 75:650
Software Coordination in Geotechnical Engineering, Robert L. Schiffman and David M. Jubenville, NMG:June 76:II-1228
Sparse Matrix Operations in Finite Element Analysis, Caleb W. McCormick, Preprint No.2765, Sept 76, 20pp.
Specifications for Successful Programming Projects, James L. Tocher, ST76:Aug 76:837
A Standard for Computer Program Distribution, John T. Christian, Chmn., GT10:Oct 76:1049:12472
Stresses in GRP Cylinders with Radial Line Load, Fred C. McCormick and Richard T. Hunt, EM4: Aug 75:417:11520

Computers

ACI Building Code in Decision Logic Table Format, Jimmy L. Noland and Chuan C. Feng, ST4:Apr 75: 677:11220

Analysis of Lateral Buckling in Plane Frames, Porpan Vacharajittiphan and Nicholas S. Trahair, ST7:July 75:1497:11430
Analysis of Shear Cores Using Superelements, Barry J. Goodno and James M. Gere, ST1:Jan 76:267:11837
Automated Analysis of Standard Buildings, Norman R. Maham, ST4:Apr 75:751:11265
Automatic Control of Large-Scale Combined Sewer Systems, John W. Labadie, Neil S. Grigg and Bruce M. Bradford, EE1:Feb 75:27:11115
Building Construction Management Game, Kenneth F. Reinschmidt, James W. Litchfield and Steven D. Hunt, EI2:Apr 75:117:11248
Computer Usage and Pricing Alternatives for Consultants, Norman R. Greve, EI2:Apr 75:93:11237
Computing Education through Program Evaluation, John Y. Campbell, EI2:Apr 75:149:11240
Concepts of Project Planning and Control, Boyd C. Paulson, Jr., CO1:Mar 76:67:11984
Conditioning of Structural Flexibility Matrix, Charles H. Goodspeed and Michael J. Martin, ST8:Aug 74:1677:10763
Control Densification by Analytic Photogrammetry, Wesley V. Hull, SU1:Oct 75:11:11624
Convective Transport Finite Element Analog, Keith W. Bedford and James A. Liggett, EM6:Dec 75:803:11807
Design Lead Time Predictions, Earl Rogers, TE4:Nov 76:737:12569
Efficient Design-Analysis of Physically Nonlinear Trusses, Edwin C. Rossow, David L.C. Lo and Shih-Lung Chu, ST4:Apr 75:839:11257
The Engineering Computer Revolution—Over or Just Beginning, David E. Wojick, EI3:July 76:351:12276
Engineering Scheduling with Manpower Allocation, Jerome P. Miller, Jr., EI2:Apr 75:107:11255
Engineers and Computers — Interaction or Reaction, Richard L. Bland, EI2:Apr 75:79:11253
Estimating—State-of-the-Art, Carl A. Erikson and LeRoy T. Boyer, CO3:Sept 76:455:12382
Examples of Computer Usage in Bridge Design, Robert J. Cope and John H. Bungey, ST4:Apr 75:779:11230
FILES: Automated Engineering Data Management System, Leonard A. Lopez, ST4:Apr 75:661:11241
The History of Computers — A Vendor's View, Vincent J. Vitagliano, Preprint No.2759, Sept 76, 22pp.
Hybrid Computer Model of St. Venant Equations, Martin Oosterveld and Kaz Adamowski, HY10:Oct 76:1491:12467
Impact of CDC STAR-100 Computer on Finite Element Systems, Ahmed K. Noor and Robert E. Fulton, ST4:Apr 75:731:11216
Information Models in Building Design Process, Alan D. Russell, EI2:Apr 75:133:11217
Integrated System for Production of Joists, A. Murray Lount and Sidney H. Simmonds, ST4:Apr 75:807:11242
Modeling the Chipuxet Ground Water Aquifer, William E. Kelly, NMG:June 76:II-1188
Numerical Errors in Water Profile Computation, Edward A. McBean and Frank E. Perkins, HY11:Nov 75:1389:11694
On the Accuracy of the Solution of Finite Element Equilibrium Equations, Klaus-Jurgen Bathe, NMG:June 76:I-82
Pocket Calculators Take Hold in Civil Engineering, Eugene E. Dallaire, CE:Feb 75:39
Practical Applications of Structural Optimization, George G. Goble and Fred Moses, ST4:Apr 75:635:11267
A Practical Monthly Optimum Operations Model, Dan M. Fults, Lawrence F. Hancock and Glen R. Logan, WR1:Apr 76:63:12063
Pressure Reducing Valves in Pipe Network Analysis, Roland W. Jeppson and Allen L. Davis, HY7:July 76:987:12252
A Review of Electronic Computing for Civil Engineering Within the Federal Government, David R. Schelling, Preprint No.2818, Sept 76, 29pp.
Seismic Behavior of K-Braced Framing Systems, James C. Anderson, ST10:Oct 75:2147:11636
Seismic Response of Pipelines on Friction Supports, James C. Anderson and Anand K. Singh, EM2:Apr 76:275:12043
Simulation Model for Tunnel Construction Costs, Fred Moavenzadeh and Michael J. Markow, CO1:Mar 76:51:11967
Single Element Panel for Flat Plate Structures, Sid French, Algis P. Kabaila and Victor A. Pulmano, ST9:Sept 75:1801:11553
Sparsity Oriented Analysis of Large Pipe Networks, M. Chandrashekar and K. H. Stewart, HY4:Apr 75:341:11260
A Standard for Computer Program Distribution, John T. Christian, Chmn., GT10:Oct 76:1049:12472
The State-of-the-Art of Computer Graphics Applications in Structural Engineering, Robert D. Logcher, Chmn., ST3:Mar 75:459:11158
Structural Optimization by Equilibrium Linear Programming, Kenneth F. Reinschmidt and Thanet Norabhoompipat, ST4:Apr 75:919:11219
Teaching Structural Analysis and Design Using Computers, Oktay Ural, Preprint No.2737, Sept 76, 8pp.
Technical Information Processing Systems, William F. Bates, EI2:Apr 75:189:11254
Use of Computers in Transmission Tower Design, David L.C. Lo, Andrew Morcos and Surendra K. Goel, ST7:July 75:1443:11410
Use of Finite Element Analyses for Railcar Design, Michael J. Dennis, TE1:Feb 76:105:11921
Water Quality Management and Information Systems, William D. Haseman, Arthur Z. Lieberman and Andrew B. Whinston, HY3:Mar 75:477:11185

Computer Systems Programs

Computer-Based Technology Transfer, Roberta H. Ewald, Charles H. Goodspeed, Richard A. Jones, Robert R. Smith, Daniel R. Rehak, John G. Voreades and Ben Y.C. Wong, EI2:Apr 75:175:11228
Computer Pricing Policy and Methods, Norman R. Greve, Chmn., EI4:Oct 76:437:12505
The Engineering Computer Revolution—Over or Just Beginning, David E. Wojick, EI3:July 76:351:12276
FAR — A Self-Teaching Frame Analysis Routine, Yehia Bahel-El-Din and Senol Utku, Preprint No.2737, Sept 76, 44pp.
Impact of CDC STAR-100 Computer on Finite Element Systems, Ahmed K. Noor and Robert E. Fulton, ST4:Apr 75:731:11216
Managing a Computer Program Development Project, A. Murray Lount, ST76:Aug 76:921
New Concepts-Byproducts of Computer Technology, Fazlur R. Khan, ST4:Apr 75:627:11243
Software Coordination in Geotechnical Engineering, Robert L. Schiffman and David M. Jubenville, NMG:June 76:II-1228
Software: Internal Maintenance Documentation, David M. Jubenville, Elizabeth Heinze and Robert L. Schiffman, ST76:Aug 76:903
Specifications for Internal Programming Logic, Paul D. Barclay, ST76:Aug 76:869
Specifications for Successful Programming Projects, James L. Tocher, ST76:Aug 76:837
User Documentation for Engineering Software, James P. Cassidy, Norman R. Greve and Douglas F. Burnside, ST76:Aug 76:884

Computer Terminals

The CRT Computer-Graphics Terminal: Indispensible Design-Aid for Some Structural Engineers, Eugene E. Dallaire, CE:Feb 76:47

Concentrated Loads

Aluminum Beam Webs Under Concentrated Loads, Maurice L. Sharp, ST76:Aug 76:569
Stability of Vertical Corner Cut with Concentrated Surcharge Load, Max W. Giger and Raymond J. Krizek, GT1:Jan 76:31:11842

Concentration
Oxygen Transfer at High Solids Concentrations, Dale R. Baker, Raymond C. Loehr and Arthur C. Anthonisen, EE5:Oct 75:759:11641
Statistical Design of Equalization Basins, Dominic M. Di Toro, EE6:Dec 75:917:11782

Concrete
Analysis of Reinforced Fibrous Concrete Beams, Charles H. Henager and Terrence J. Doherty, ST1: Jan 76:177:11847
Boase Award to Cameron, CE:Apr 76:95
Comparison of Three-Dimensional Analysis of Concrete Shear Wall Buildings and Their Actual Behavior, Venkataswamy Ramakrishnan, ST76:Aug 76:95
Concrete Applications in Transportation Construction (1891-1976), Gordon K. Ray, Preprint No.2745, Sept 76, 29pp.
Concrete Bearing Strength—Support, Mix, Size Effect, Sanat Kumar Niyogi, ST8:Aug 74:1685: 10765
Concrete Failure Related to Constituent Properties, Rene B. Testa and Norris Stubbs, EM3:June 76: 515:12212
Concrete in Water Resource and Energy Development, Harold G. Arthur, Preprint No.2741, Sept 76, 30pp.
Concrete Material Response by Acoustic Spectra Analysis, Demeter G. Fertis, ST2:Feb 76:387:11943
Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, Preprint No.2702, Apr 76, 30pp.
Concrete Replaces Steel in Offshore Coal-Loading Terminal, A. G.F. Eddie, CE:Apr 76:60
Concrete Walls for Highway Noise Reduction, Edwin C. Lokken, TE4:Nov 76:637:12534
Constitutive Equations and Punch-Indentation of Concrete, Andrie C.T. Chen and Wai F. Chen, EM6:Dec 75:889:11809
Constitutive Relations for Concrete, Andrie C.T. Chen and Wai F. Chen, EM4:Aug 75:465:11529
Containment Vessel Design —ASME Section III Division 1 Versus Division 2, Norman W. Edwards, STN75:Dec 75:II-361
Control of Expansive Concretes During Construction, Clyde E. Kesler, CO1:Mar 76:41:11968
Deck Slab Repaired by Fibrous Concrete Overlay, Ernest K. Schrader and Anthony V. Munch, CO1: Mar 76:179:11976
Dual Failure Criterion for Plain Concrete, Han-Chin Wu, EM6:Dec 74:1167:10996
Durability of Concrete Construction—50 Years of Progress, Bryant Mather, CO1:Mar 75:5:11165
Durability of Concrete in Seawater, Povindar K. Mehta and Harvey H. Haynes, ST8:Aug 75:1679: 11516
Durability Tests on Some Aggregates for Concrete, L. Srinivasa-Iyer, Perry M. Rahn, Venkataswamy Ramakrishnan and James E. Russell, CO3:Sept 75: 593:11574
Early Developments in American Concrete, Russell S. Fling, Preprint No.2791, Sept 76, 24pp.
Effects of Elevated Temperature on Structural Members, Tasnim Uddin and Charles G. Culver, ST7:July 75:1531:11440
Endochronic Theory of Inelasticity and Failure of Concrete, Zdenek P. Bazant and Parameshwara D. Bhat, EM4:Aug 76:701:12360
Fibrous Concrete Repair of Cavitation Damage, Ernest K. Schrader and Anthony V. Munch, CO2: June 76:385:12198
Fifty-Year Developments in High Strength Concrete, Colin D. Johnston, CO4:Dec 75:801:11757
Form Pressure and Relaxation in Formwork, Myron Levitsky, EM3:June 75:267:11379
Fracture and Stress-Strain Relationship of Concrete Under Triaxial Compression, Ranga Palaniswamy and Surendra P. Shah, ST5:May 74:901:10547
Fracture of Pavement Materials, Geoffrey E. Blight, TE4:Nov 73:801:10139
Gap-Graded Concrete for Paving Construction, Ram Kinkar Ghosh and Mukul Ranjan Chatterjee, CO1: Mar 76:227:11988
Handling Concrete—Then and Now, Joseph J. Waddell, CO4:Dec 75:819:11779
Instability, Ductility, and Size Effect in Strain-Softening Concrete, Zdenek P. Bazant, EM2:Apr 76:331:12042
Landmarks Attest CE Contribution to Progress, CE: Aug 76:76
Optimum Use of Pretensioning, Post-Tensioning, and Two-Way Prestressing, Narindar Bhandari, TN: CO2:June 76:403:12167
Probabilistic Analysis of Fiber-Reinforced Concrete, Antoine E. Naaman, Fred Moavenzadeh and Frederick J. McGarry, EM2:Apr 74:397:10491
Recent Japanese Developments in Mixed Structures, Minoru Wakabayashi, ST76:Aug 76:497
Reinforced Concrete Materials — A Remarkable Heritage, Clyde E. Kesler, Preprint No.2755, Sept 76, 21pp.
Slipform Pavers Prove Their Versatility, Gordon K. Ray, Edwin C. Lokken and Robert G. Packard, TE4:Nov 75:721:11725
Stresses in Concrete Around Spiral Case, Prem S. Nigam, Om P. Jain and Madhu B. Kanchi, PO1:Jan 76:95:11845
Structural Economy of Certain Scalloped Shells, Ravindra K. Vyas and Sang Ho Do, ST76:Aug 76: 205
Ultimate Strength of Continuous Composite Beams, Sumio Hamada and Jack Longworth, ST7:July 76: 1463:12267
Yield Criterion for Reinforced Concrete Slabs, Satish C. Jain and John B. Kennedy, ST3:Mar 74:631: 10409
Yield-Line Design of Slabs, Sidney H. Simmonds and Amin Ghali, ST1:Jan 76:109:11853

Concrete (Admixtures)
Volume and Strength of a Dolos, Harshkumar C. Desai, WW1:Feb 76:79:11928

Concrete (Blocks)
Bearing Strength of Reinforced Concrete Blocks, Sanat Kumar Niyogi, ST5:May 75:1125:11325
Durability of Concrete in Seawater, Povindar K. Mehta and Harvey H. Haynes, ST8:Aug 75:1679: 11516

Concrete (Post-Tensioned)
Computer Analysis of Segmentally Erected Bridges, Robert C. Brown, Jr. and Ned H. Burns, ST4:Apr 75:761:11218
Construction of Post-Tensioned PWR Containments, Kurtz L. Paulson, CO1:Mar 76:213:11981
Fifty-Year Advancement in Concrete Bridge Construction, Tung. Y. Lin and Felix Kulka, CO3: Sept 75:491:11558
Liner Anchorage Analysis for Nuclear Containments, Ted L. Winstead, Edwin G. Burdette and Daryl R. Armentrout, ST10:Oct 75:2103:11635
Optimum Use of Pretensioning, Post-Tensioning, and Two-Way Prestressing, Narindar Bhandari, TN: CO2:June 76:403:12167
Post-Tensioned Slab Bridges on Isolated Supports, Roger Green, ST1:Jan 75:233:11065
Segmental Bridges in Oregon, Louis F. Pierce, TE4: Nov 76:673:12548
Statistical Aspects of Containment Tendon Surveillance, Mahendra P. Singh and Adolf Walser, PO1:July 75:23:11406

Concrete (Precast)
Analysis of Offshore Concrete Caisson Dikes under Cyclic Loading, John T. Christian and Jean M.E. Audibert, NMG:June 76:II-979
Computer Analysis of Segmentally Erected Bridges, Robert C. Brown, Jr. and Ned H. Burns, ST4:Apr 75:761:11218
Concrete in Water Resource and Energy Development, Harold G. Arthur, Preprint No.2741, Sept 76, 30pp.
Concrete Replaces Steel in Offshore Coal-Loading Terminal, A. G.F. Eddie, CE:Apr 76:60

Fifty-Year Advancement in Concrete Bridge Construction, Tung. Y. Lin and Felix Kulka, CO3: Sept 75:491:11558
Model Study of New Standard Prestressed Concrete Bridge, Barrington deV. Batchelor, T. Ivan Campbell, Douglas W. McEwen and Paul Csagoly, ST9:Sept 76:1789:12417
Steel Frame, Precast Floors Meet Impossible Time Constraints, Arthur B. Andersen, CE:Feb 76:54
Time-Dependent Stresses in Continuous Precast Bridges, Walter H. Dilger and Amin Ghali, CO1: Mar 76:239:11964

Concrete (Prestressed)

Concrete in Water Resource and Energy Development, Harold G. Arthur, Preprint No.2741, Sept 76, 30pp.
Construction of Large Prestressed Concrete Girders, J. Neil Mustard and Ram S. Ghosh, CO4:Dec 74: 507:10994
Deep Sea Construction, S. Samuel Doughty, CO3: Sept 75:607:11575
Displacements and Losses in Multistage Prestressed Members, Amin Ghali, Romy G. Sisodiya and Gamil S. Tadros, ST11:Nov 74:2307:10968
Examples of Computer Usage in Bridge Design, Robert J. Cope and John H. Bungey, ST4:Apr 75: 779:11230
Fifty-Year Advancement in Concrete Bridge Construction, Tung. Y. Lin and Felix Kulka, CO3: Sept 75:491:11558
Fracture and Stress-Strain Relationship of Concrete Under Triaxial Compression, Ranga Palaniswamy and Surendra P. Shah, ST5:May 74:901:10547
Instability, Ductility, and Size Effect in Strain-Softening Concrete, Zdenek P. Bazant, EM2:Apr 76:331:12042
Long Line Production of Building Elements in United States, Ross H. Bryan, CO1:Mar 75:143: 11188
Minimum Cost Design of Elevated Transit Structures, Antoine E. Naaman and Marshall L. Silver, CO1:Mar 76:99:11986
Minimum Cost Versus Minimum Weight of Prestressed Slabs, Antoine E. Naaman, ST7:July 76: 1493:12268
Model Study of New Standard Prestressed Concrete Bridge, Barrington deV. Batchelor, T. Ivan Campbell, Douglas W. McEwen and Paul Csagoly, ST9:Sept 76:1789:12417
Optimum Use of Pretensioning, Post-Tensioning, and Two-Way Prestressing, Narindar Bhandari, TN: CO2:June 76:403:12167
Prestressed Box Beams under Combined Loading, David W. Johnston and Paul Zia, ST7:July 75:1313: 11421
Prestressed Concrete Bridges, Brice F. Bender, Preprint No.2742, Sept 76, 20pp.
Shear Failure Due to Web Crushing in Prestressed Concrete I-Beams, Larp Chitnuyanondh, T. Ivan Campbell, Barrington deV. Batchelor and Paul Csagoly, T76:Aug 76:476
Structural Failures and How to Prevent Them, Dov Kaminetzky, CE:Aug 76:60
Theory for Concrete Beams in Torsion and Bending, Kevin D. Below, B. Vijaya Rangan and A. Stanley Hall, ST8:Aug 75:1645:11480
Torsional Strength of Prestressed Concrete Beams, H. Roger Woodhead and Arthur E. McMullen, ST5: May 74:881:10545

Concrete (Reinforced)

Analysis of RC Shear Panels under Cyclic Loading, David Darwin and David A. Pecknold, ST2:Feb 76: 355:11896
Analysis of Reinforced Fibrous Concrete Beams, Charles H. Henager and Terrence J. Doherty, ST1: Jan 76:177:11847
Analysis of Tall Buildings Using Member Groups, David J. Harman and William H. Walker, ST3:Mar 75:567:11173
Applications of Photoelasticity to Structural Analysis, J. F. Jullien, R. Duhau and J. C. Cubaud, EM5:Oct 76:867:12486
Arrangements of Separate Elastic Bodies, Colin B. Brown, EM6:Dec 76:971:12635
Bailey's Crossroads Collapse Reviewed, Ingvar Schousboe, CO2:June 76:365:12186
Bearing Strength of Reinforced Concrete Blocks, Sanat Kumar Niyogi, ST5:May 75:1125:11325
Collapse of Curved Reinforced Concrete Beams, Ian J. Jordaan, Magdi M. A. Khalifa and Arthur E. McMullen, ST11:Nov 74:2255:10951
Composite Steel-Deck Concrete Floor Systems, Reinhold M. Schuster, ST5:May 76:899:12116
Concrete L-Beams Subject to Combined Torsional Loads, D. Wayne Kirk and David G. McIntosh, ST1:Jan 75:269:11064
Concrete Pipe Culvert Behavior - Part 2, Raymond Eugene Davis and Alfred E. Bacher, ST3:Mar 74: 615:10408
Concrete Pipe Culvert Behavior—Part 1, Raymond Eugene Davis, Alfred E. Bacher and John C. Obermuller, ST3:Mar 74:599:10404
Cracking Analysis of Reinforced Concrete Plates, Maharaj K Wanchoo and Gerald W. May, ST1:Jan 75:201:11059
Design of Reinforced Concrete Spandrel Beams, Thomas T.C. Hsu and Kenneth T. Burton, ST1:Jan 74:209:10277
Design Recommendations for Steel Deck Floor Slabs, Max L. Porter and Carl E. Ekberg, Jr., ST11:Nov 76:2121:12528
Ductile Behavior of Coupled Shear Walls, Thomas Paulay and Arumbakkam R. Santhakumar, ST1:Jan 76:93:11852
Dynamic Properties of Tall Shear-Wall Buildings, George T. Taoka, Augustine S. Furumoto and Arthur N.L. Chiu, ST2:Feb 74:305:10336
Estimating Damping of Real Structures, Jon D. Raggett, ST9:Sept 75:1823:11554
Experience with Computer-Aided Drafting System, Geoffrey M.J. Williams, ST4:Apr 75:649:11224
A Fail-Safe Subaqueous Concrete Sewer, Gerald G. Emerson, CE:Sept 75:77
Fiber Reinforced Concrete Extrusion, Ronald F. Zollo, ST12:Dec 75:2573:11798
Historical Review of Earthquakes, Damage, and Building Codes, Glen V. Berg, ST76:Aug 76:387
A History of Joints in Concrete Pavements, John P. Cook, CO1:Mar 75:29:11201
Inelastic Analysis of Reinforced Concrete Frames, Leone Corradi, Osvaldo De Donato and Giulio Maier, ST9:Sept 74:1925:10832
Instability, Ductility, and Size Effect in Strain-Softening Concrete, Zdenek P. Bazant, EM2:Apr 76:331:12042
Interactive Computer Design of Reinforced Concrete Beams and Columns, Melvin R. Ramey, Preprint No.2737, Sept 76
Interface Shear Transfer and Dowel Action in Cracked Reinforced Concrete Subject to Cyclic Shear, Rafael Jimenez, Philip Perdikaris, Peter Gergely and Richard N. White, ST76:Aug 76:457
An Investigation of the Effective Width of the Reinforced Concrete T-Beam, Gajanan M. Sabnis and William D. Lord, Preprint No.2746, Sept 76, 30pp.
Landmarks in Reinforced Concrete, John A. Diehl, CE:Nov 75:87
Local Buckling of Long-Span Concrete Folded Plates, Stuart E. Swartz and Vernon H. Rosebraugh, ST10: Oct 76:1981:12455
Minimum Cost Selection of One-Way Slab Thickness, Russell H. Brown, ST12:Dec 75:2585: 11785
Nonlinear Analysis of RC Shells of General Form, Cheng-Shung Lin and Alexander C. Scordelis, ST3: Mar 75:523:11164
Nonlinear Seismic Response of a Coupled Wall System, Stephen A. Mahin and Vitelmo V. Bertero, ST9:Sept 76:1759:12407
Plastic Collapse of Folded Plate Structures, Morris N. Fialkow, ST7:July 75:1559:11465
Post-Crushing Behavior of Unbound Concrete Beams, Mohammad Iqbal and David S. Hatcher, ST11:Nov 75:2303:11719

Probabilistic Analysis of Fiber-Reinforced Concrete, Antoine E. Naaman, Fred Moavenzadeh and Frederick J. McGarry, EM2:Apr 74:397:10491
Pull-Out Mechanism in Steel Fiber-Reinforced Concrete, Antoine E. Naaman and Surendra P. Shah, ST8:Aug 76:1537:12313
Punching Shear Strength of Restrained Slabs, Brian E. Hewitt and Barrington deV. Batchelor, ST9:Sept 75:1837:11548
Reinforced Concrete Corners and Joints Subjected to Bending Moment, Ingvar H.E. Nilsson and Anders Losberg, ST6:June 76:1229:12222
Reinforced Concrete Hyperbolic Paraboloid Shells, Richard N. White, ST9:Sept 75:1961:11595
Reinforced Concrete Materials — A Remarkable Heritage, Clyde E. Kesler, Preprint No.2755, Sept 76, 21pp.
Repair of Earthquake Damaged Underground Reservoir, Daniel J. Smith, Jr., CO3:Sept 74:449:10825
Seismic and Cyclonic Response of Continuous Frames, Gerald M. Smith, George C. Ernst and Mahendra Maheshwari, ST2:Feb 74:391:10355
Shear-Bond Analysis of Steel-Deck-Reinforced Slabs, Max L. Porter, Carl E. Ekberg, Jr., Lowell F. Greimann and Hotten A. Elleby, ST12:Dec 76:2255:12611
Simulated Earthquake Tests of R/C Frames, Shunsuke Otani and Mete A. Sozen, ST3:Mar 74:687:10435
Soil-Structure Interaction of Concrete Pipe Systems, Raymond J. Krizek, Ross B. Corotis and Thomas H. Wenzel, ST76:Aug 76:607
Strength Decay of RC Columns under Shear Reversals, James K. Wight and Mete A. Sozen, ST5:May 75:1053:11311
Strength of Slab-Column Connections with Shear and Unbalanced Flexure, Robert Park and Shafiqul Islam, ST9:Sept 76:1879:12419
Structural Failures and How to Prevent Them, Dov Kaminetzky, CE:Aug 76:60
Structural Fire Resistance of Concrete, Eduardo Salse and Tung D. Lin, ST1:Jan 76:51:11835
Substitute-Structure Method for Seismic Design in R/C, Akenori Shibata and Mete A. Sozen, ST1:Jan 76:1:11824
Tests on Slab-Column Connections with Shear and Unbalanced Flexure, Shafiqul Islam and Robert Park, ST3:Mar 76:549:11972
Theory for Concrete Beams in Torsion and Bending, Kevin D. Below, B. Vijaya Rangan and A. Stanley Hall, ST8:Aug 75:1645:11480
Thermal Stress as a Narrow-Band Random Load, Robert A. Heller, EM5:Oct 76:787:12450
Thinking Aesthetically is a Part of Structural Engineering, Frederick M. Law, ST76:Aug 76:1
Torsional Response of High-Rise Buildings, Gary C. Hart, Roger M. DiJulio, Jr. and Marshall Lew, ST2:Feb 75:397:11126
Torsion-Bending-Shear Interaction for Concrete Beams, Lennart Elfren, Inge Karlsson and Anders Losberg, ST8:Aug 74:1657:10749
The Turn From Masonry: A Study of Arch Bridges in Reinforced Concrete, David P. Billington, Preprint No.2819, Sept 76, 30pp.
Ultimate Strength Study of Two-Way Concrete Slabs, Michael S. Black, ST1:Jan 75:311:11077
Ultimate Torque of Reinforced Concrete Beams, David J. Victor, Narayanan Lakshmanan and Narayanan Rajagopalan, ST7:July 76:1337:12249
Volume and Strength of a Dolos, Harshkumar C. Desai, WW1:Feb 76:79:11928
Yield Criterion for Reinforced Concrete Slabs, Satish C. Jain and John B. Kennedy, ST3:Mar 74:631:10409
Yield-Line Design of Slabs, Sidney H. Simmonds and Amin Ghali, ST1:Jan 76:109:11853
9000 psi Concrete — Why? Why not?, William Schmidt and Edward S. Hoffman, CE:May 75:52

Concrete Construction

Durability of Concrete Construction—50 Years of Progress, Bryant Mather, CO1:Mar 75:5:11165
Optimizing the Selection of Marine Retaining Walls, Robert C. Johnston, Max Bernheimer and Dominic A. Zarrella, Preprint No.2710, Apr 76, 28pp.
Runway Rebuilding with Daily Use, Grant S. Anderson and Kenneth T. Giles, CE:Mar 75:78

Concrete Durability

Endochronic Theory of Inelasticity and Failure of Concrete, Zdenek P. Bazant and Parameshwara D. Bhat, EM4:Aug 76:701:12360
Landmark Erie Canal Structure Rehabilitated, Lawrence H. Lehman, Bertram Shapiro and Robert J. Trapani, CE:Oct 76:62

Concrete Linings

Deterioration of Concrete Ditch Liners in Saline-Alkali Soil, Luther B. Grass and Paul Koluvek, IR4:Dec 74:477:10997

Concrete Mixes

Concrete Material Response by Acoustic Spectra Analysis, Demeter G. Fertis, ST2:Feb 76:387:11943
Gap-Graded Concrete for Paving Construction, Ram Kinkar Ghosh and Mukul Ranjan Chatterjee, CO1:Mar 76:227:11988
Handling Concrete—Then and Now, Joseph J. Waddell, CO4:Dec 75:819:11779

Concrete Pavements

Finite Element Analysis of Pile-Supported Pavement Structures, Raman Pichumani, John E. Crawford and George E. Triandafilidis, TE2:May 74:293:10516
Fly Ash Pavements, Run Ways to Take Off?, Virginia Fairweather and Marvin L. Byington, CE:Aug 75:57

Concrete Piles

Finite Element Analysis of Piles in Expansive Media, Joram M. Amir and M. Sokolov, GT7:July 76:701:12256

Concrete Pipes

Concrete Pipe Culvert Behavior - Part 2, Raymond Eugene Davis and Alfred E. Bacher, ST3:Mar 74:615:10408
Concrete Pipe Culvert Behavior—Part 1, Raymond Eugene Davis, Alfred E. Bacher and John C. Obermuller, ST3:Mar 74:599:10404
A Fail-Safe Subaqueous Concrete Sewer, Gerald G. Emerson, CE:Sept 75:77
Soil-Structure Interaction of Concrete Pipe Systems, Raymond J. Krizek, Ross B. Corotis and Thomas H. Wenzel, ST76:Aug 76:607

Concrete Placing

Handling Concrete—Then and Now, Joseph J. Waddell, CO4:Dec 75:819:11779

Concrete Properties

Concrete Failure Related to Constituent Properties, Rene B. Testa and Norris Stubbs, EM3:June 76:515:12212
Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, Preprint No.2702, Apr 76, 30pp.
Physical Properties of Premixed Polymer Concrete, Tse-Yung P. Chang and Howard L. Stephens, ST11:Nov 75:2293:11704

Concretes

Concrete Technology Aspects of CN Tower, John A. Bickley, CO1:Mar 75:201:11192
Half Century of USBR Arch Dam Construction, James R. Graham, James Legas and Ernest A. Lindholm, CO2:June 75:281:11387
A History of Joints in Concrete Pavements, John P. Cook, CO1:Mar 75:29:11201
In-Place Evaluation of Concrete, V. Mohan Malhotra, CO2:June 75:345:11354
Load-Induced Strains in Hardened Cement Paste, Leslie J. Parrott and John M. Illston, EM1:Feb 75:13:11118

Maintenance Management Aids, Eugene L. Marvin, Preprint No.2637, Apr 76, 25pp.
Past and Future of Concrete Quality Control, Venkataswamy Ramakrishnan, CO2:June 76:263: 12187

Concrete Slabs
Deck Slab Repaired by Fibrous Concrete Overlay, Ernest K. Schrader and Anthony V. Munch, CO1: Mar 76:179:11976
High-Temperature Drying of Thick Concrete Slabs, Harshavordhan C. Mehta, Wai F. Chen, John A. Manson and John W. Vanderhoff, TE2:May 76: 185:12102
A History of Joints in Concrete Pavements, John P. Cook, CO1:Mar 75:29:11201
Long Line Production of Building Elements in United States, Ross H. Bryan, CO1:Mar 75:143: 11188
Minimum Cost Selection of One-Way Slab Thickness, Russell H. Brown, ST12:Dec 75:2585: 11785
Optimum Steel Distribution in Corner Slabs, Ganpat S. Pandit and Subodh C. Sharma, TN: ST12:Dec 76:2360:12593
Polymer-Impregnated Concrete: Field Studies, Harshavardhan C. Mehta, John A. Manson, Wai F. Chen and John W. Vanderhoff, TE1:Feb 75:1: 11103
Post-Tensioned Slab Bridges on Isolated Supports, Roger Green, ST1:Jan 75:233:11065
Punching Shear Strength of Restrained Slabs, Brian E. Hewitt and Barrington deV. Batchelor, ST9:Sept 75:1837:11548
Shear Strength of Two-Way Bridge Slabs, Barrington deV. Batchelor and Ian R. Tissington, ST12:Dec 76:2315:12604
Ultimate Strength Study of Two-Way Concrete Slabs, Michael S. Black, ST1:Jan 75:311:11077
Yield Criterion for Reinforced Concrete Slabs, Satish C. Jain and John B. Kennedy, ST3:Mar 74:631: 10409
Yield-Line Design of Slabs, Sidney H. Simmonds and Amin Ghali, ST1:Jan 76:109:11853

Concrete Structures
Computer-Aided Design: Toward an Optimal Design of Concrete Structures, Yogindra N. Anand, Edward J. Rhomberg and Constancio F. Miranda, ST76:Aug 76:1060
Simplified N-Dimensional Interaction Surfaces, Thomas A. Duffey and Howard L. Schreyer, ST7: July 76:1291:12230

Concrete Technology
Concrete Technology Aspects of CN Tower, John A. Bickley, CO1:Mar 75:201:11192

Conditional Probability
Bidding Models: Truths and Comments, Michael Fuerst, CO1:Mar 76:169:11991

Conductivity
Marine Sediment Pollution Study by Electric Conductivity Method, Mian-Chang Wang, David H. Killoy and Vito A. Nacci, Preprint No.2664, Apr 76, 19pp.

Conduits
Air-Entrainment in High Head Gated Conduits, Hari R. Sharma, HY11:Nov 76:1629:12523

Cones
Cone Penetration of Granular and Cohesive Soils, Raymond N. Yong and Choong-Kong Chen, EM2: Apr 76:345:12081

Conferences
Energy Conservation in Transportation, CE:Feb 76: 24
Geotechnical Engineering—and the Law, CE:July 76: 18
How the Soviets Build on Permafrost, Leonard LeSchack and Reuben Kachadoorian, CE:Apr 75:57
Progressive Collapse Discussed in Texas, CE:Feb 76: 20
Regulations—Boon or Bane?, CE:Dec 76:73
Resolutions Adopted at the Fourth National Seminar on the Planning, Design and Implementation of Bicycle and Pedestrian Facilities, Elizabeth A. Drake, BP75:Dec 75:591
Round Table Discussion on Future Conferences, Walter H. Kraft, BP75:Dec 75:585
Symposium Honors T.Y. Lin, CE:Aug 76:71
Uses of Cold-Formed Steel in Construction on Rise, CE:Feb 76:18

Confined Water
Control of Salt-Water Intrusion by Recharge Wells, Abdel-Aziz I. Kashef, IR4:Dec 76:445:12617

Confining Pressure
Dynamic Shear Moduli for Dry Sands, Mehmet A. Sherif and Isao Ishibashi, GT11:Nov 76:1171:12572
A General Function for Stress-Strain Curves, Chandrakant S. Desai and Tien H. Wu, NMG:June 76:I-306

Conflict
Resolving Conflicts Between People and Cars, Herbert S. Levinson, BP75:Dec 75:97

Conjunctive Use
Screening Model for Conjunctive-Use Water Systems, Abdullatif S. Hamdan and Dale D. Meredith, HY10:Oct 75:1343:11611

Connecticut
Lead Analysis in Dredge Spoil Elutriates, Walter G. Cox, DIEE:Jan 76:242
Management of Connecticut River Flood Problems, S. Lawrence Dingman, WW76:Aug 76:832

Connections
Composite Connections to External Columns, Peter Ansourian and Jack William Roderick, ST8:Aug 76: 1609:12320

Connections (Joints)
Connections for Steel Structures — History, State of Art, and Potential Developments, John W. Fisher, Preprint No.2748, Sept 76, 21pp.
Fifty Years of Riveted, Bolted, and Welded Steel Construction, William E. Munse, CO3:Sept 76:437: 12399
Tests of Welded Steel Beam-to-Column Moment Connections, John Parfitt, Jr. and Wai F. Chen, ST1:Jan 76:189:11854

Conservation
Conservation of Energy in Buildings, Vance L. Sailor, CO3:Sept 74:295:10795
Improved Fish Protection at Intake Systems, Victor J. Schuler and Lory E. Larson, EE6:Dec 75:897: 11756
The Miami Conservancy District — A Study in Self Help, L. Bennett Coy, Preprint No.2747, Sept 76, 11pp.
National Land-Use Policy: Is it Needed?, Daniel A. Dreyfus, UP1:Aug 76:9:12324
Oxnard-Hueneme Pipeline, Operation and Water Quality Problems, Richard A. Smith, Preprint No.2683, Apr 76, 8pp.
A Potential Irrigation-Conservation Program for 300,000 Acres in Northern Maine, Robert G. Hunt, Preprint No.2762, Sept 76, 23pp.
Use of Remote Sensing for Mapping Wetlands, Robert J. Reimold and Rick A. Linthurst, TE2:May 75:189:11293

Consolidation
Analysis of Consolidation in Cores of Earth Dams, Zdenek Eisenstein, Addanki V.G. Krishnayya and Steven T.C. Law, NMG:June 76:II-1089
At-Rest Lateral Earth Pressure of Consolidating Clay, M. Salah Abdelhamid and Raymond J. Krizek, GT7:July 76:721:12240

Compressibility of Undisturbed Submarine Sediments, William F. Brumund and Gordon W. Callender, Jr., OE75:June 75:363
Consolidation of Root-Penetrated Clays: A Case Study, Michael W. O'Neill, B. Kent Merritt and Ronald Calsing, GT8:Aug 76:857:12318
Consolidation of Thick Beds of Clay, Pasquale De Simone and Carlo Viggiani, NMG:June 76:II-1067
Consolidation Settlement of a Layered Subsurface, Surendra K. Saxena, Chandrakant S. Desai and Jayant Vir, NMG:June 76:II-1082
Consolidation Settlement of a Layered Subsurface, Surendra K. Saxena and Chandrakant S. Desai, NMG:June 76:III-1419
Consolidation with Internal Pressure Generation, John T. Christian, TN: GT10:Oct 76:1111:12445
Electro-Osmotic Consolidation of Soils, Tai-Yeu Wan and James K. Mitchell, GT5:May 76:473:12156
Method of Calculating Long-Term Creep Settlements, Harry G. Poulos, Laurence P. de Ambrosis and Edward H. Davis, GT7:July 76:787:12273
New York's Glacial Formation of Varved Silt and Clay, James D. Parsons, GT6:June 76:605:12218
Non-Linear Flow and Deformation Analysis of Consolidated Problems, Roland W. Lewis, G. W. Roberts and Olgierd C. Zienkiewicz, NMG:June 76:II-1106
Pore Pressures Near Moving Underwater Slope, Karel L. Meijer and Adriaan G. van Os, GT4:Apr 76:361:12021
Prediction of Downdrag Forces in End-Bearing Piles, Harry G. Poulos and Edward H. Davis, GT2:Feb 75:189:11144
Recording Rapid Settlement by the Oedometer, David M. McCann, Jon Darwell and Bruce Denness, OE75:June 75:401
Stabilization of Polluted Dredgings by Electro-Osmosis, Raymond J. Krizek, Francis B. Gularte and Paul L. Hummel, Preprint No.2641, Apr 76, 30pp.
Strength of One Dimensionally Consolidated Clays, Adel S. Saada and Gary F. Bianchini, GT11:Nov 75:1151:11707
Stress-Deformation-Time Behavior of Dredgings, Abdelsalam M. Salem and Raymond J. Krizek, GT2:Feb 76:139:11917
Treatment of Soft Foundations — A Review of Current Practice, Ara Arman, Preprint No.2797, Sept 76, 36pp.
Variational Principles for Finite Element Analysis of Consolidation, Ranbir S. Sandhu, NMG:June 76:I-20
Viscoelastic Analysis About Deformation of Weak Ground, Tomoyuki Akagi, Yoshinori Ito and Makoto Irobe, NMG:June 76:II-639

Constraints

Case Study of Carless Mobility Constraints, K. C. Koutsopoulos and Vasant H. Surti, TE4:Nov 76:745:12566
Gradient Methods in Optimum Structural Design, Emil O. Frind and Peter M. Wright, ST4:Apr 75:937:11236
Logical Complexity in Engineering Specifications, Jimmy L. Noland, ST76:Aug 76:761
Optimum Structural Design with Dynamic Constraints, Juan H. Cassis and Lucien A. Schmit, Jr., ST10:Oct 76:2053:12491
Selection of Models for Urban Drainage Problems: Technical Aspects and Non-Technical Constraints, Paul E. Wisner, Adel F. Ashmalla and Patrick A. Ahern, IR76:July 76:246

Constrictions

Quadratic Loss and Scattering of Long Waves, Chiang C. Mei, Philip L-F. Liu and Arthur T. Ippen, WW3:Aug 74:217:10754

Construction

The Adopted ASCE Guide to Turnkey Construction Contracts, David L. Narver, Jr., EI2:Apr 75:235:11249
American Road Building - Fifty Years of Progress, Herbert W. Busching and Randolph Russell, CO3:Sept 75:565:11577
Bailey's Crossroads Collapse Reviewed, Ingvar Schousboe, CO2:June 76:365:12186
Basic Construction Principles in Higher Latitudes, Shu-Tien Li, CO1:Mar 74:33:10399
Bidding Models: Truths and Comments, Michael Fuerst, CO1:Mar 76:169:11991
Bridge Construction Surveying, Ray W. Burgan, Jr., CO2:June 74:105:10602
Commentary on Safety Factors in Plastic Design, Burl R. Richardson, TN: CO4:Dec 76:683:12590
Community Development Implications of Energy Complex Construction, C. R. Cavanagh, EFEEC: Aug 75:280
Comparision of Construction Labor Agreements, Neal B.H. Benjamin and Arthur W. Young, CO1: Mar 75:183:11180
Composite Construction Methods, John P. Cook, CO1:Mar 76:21:11975
Concepts of Project Planning and Control, Boyd C. Paulson, Jr., CO1:Mar 76:67:11984
Concrete in Water Resource and Energy Development, Harold G. Arthur, Preprint No.2741, Sept 76, 30pp.
Concrete Technology Aspects of CN Tower, John A. Bickley, CO1:Mar 75:201:11192
Conference Review and Evaluation, David G. Ellingson, EFAN:Dec 74:287
Conservation of Energy in Buildings, Vance L. Sailor, CO3:Sept 74:295:10795
"Construction and Design of Cable-Stayed Bridges," by Walter Podolny, Jr. and John B. Scalzi (Book Review), Charles Seim, CE:Oct 76:34
"Construction Delay: Responsibility, Risks, and Litigation," by James J. O'Brien (Book Review), Skip O. Warren, CE:Dec 76:30
Construction Helmet Response Under Severe Impact, Werner Goldsmith, CO2:June 75:335:11349
Construction of FFTF Containment Vessel and Lock, Robert N. Lebre, CO2:June 76:325:12177
Construction of Grand Coulee Third Power Plant, Donald J. Duck, CO4:Dec 75:869:11774
Construction of Large Prestressed Concrete Girders, J. Neil Mustard and Ram S. Ghosh, CO4:Dec 74:507:10994
Construction of Post-Tensioned PWR Containments, Kurtz L. Paulson, CO1:Mar 76:213:11981
Construction of Pueblo Dam, John W. Larson, CO4:Dec 75:883:11769
Construction Productivity — How to Improve It, CE:Oct 76:57
Construction Solid Waste, David A. Spivey, CO4:Dec 74:501:10993
CONSTRUCTO — An Interactive Gaming Environment, Daniel W. Halpin, CO1:Mar 76:145:11969
Contractual Relationships in Construction, Stephen E. Smith, Woodrow W. Wilson, William C. Burns and Robert A. Rubin. CO4:Dec 75:907:11776
Control of Expansive Concretes During Construction, Clyde E. Kesler, CO1:Mar 76:41:11968
Current and Proposed Construction Research Studies, John D. Borcherding and Brennon P. Hatley, CO3:Sept 76:547:12423
The Dallas/Fort Worth Airport Project, Raymond J. Hodge, EFAN:Dec 74:220
Deck Slab Repaired by Fibrous Concrete Overlay, Ernest K. Schrader and Anthony V. Munch, CO1:Mar 76:179:11976
Deep Sea Construction, S. Samuel Doughty, CO3:Sept 75:607:11575
Developments in CPM, PERT, and Network Analysis, Calin Popescu and John D. Borcherding, CO4:Dec 75:769:11763
Developments in Trench-Type Tunnel Construction, Wayne F. Palmer and Kenneth C. Roberts, CO1:Mar 75:37:11183
Diaphragm Wall Construction Techniques, Kevin L. Nash, CO4:Dec 74:605:11025
Disaster-Caused Increases in Construction Costs, Thomas N. Yancey, Jr., James L. Douglas and D. Earl Jones, Jr., CE:Sept 76:94

Disaster Caused Increases in Unit Repair Cost, Thomas N. Yancey, Jr., L. Douglas James, D. Earl Jones, Jr. and Jeanne Goedert, WR2:Nov 76:265:12564
Durability Tests on Some Aggregates for Concrete, L. Srinivasa-Iyer, Perry M. Rahn, Venkataswamy Ramakrishnan and James E. Russell, CO3:Sept 75:593:11574
Earth Retention by Drilled Reinforced Concrete Caissons, Arthur H. Anderson, Jr., CE:Oct 76:54
Earthwork Volumes by Contour Method, Francis E. Smith, CO1:Mar 76:131:11977
Education for Construction, Albert G.H. Dietz and William A. Litle, CO2:June 76:347:12182
Energy Conservation in Housing Construction, John A. Lepore, Noam Lior and Sidney Shore, Preprint No.2781, Sept 76, 30pp.
Engineering Services for Construction, Altaf Hussain, CO3:Sept 74:273:10787
Estimation and Control of Construction Labor Costs, Boyd C. Paulson, Jr., CO3:Sept 75:623:11579
Evaluating the Quality of Constructed Environments, Rudolf H. Moos and Bernice S. Moos, EFAN:Dec 74:143
Excelling as a Construction Contractor, Altaf Hussain, CO4:Dec 74:621:11029
Fibrous Concrete Repair of Cavitation Damage, Ernest K. Schrader and Anthony V. Munch, CO2:June 76:385:12198
Fifty-Year Development — Construction of Steel Truss Bridges, Lawrence N. Bigelow, CO2:June 75:239:11381
Fifty-Year Development — Construction of Steel Pipeline Suspension Bridges, John F. Cain, CO4:Dec 75:733:11768
Fifty-Year Development: Construction of Steel Arch Bridges, William F. Hollingsworth, CO1:Mar 75:85:11187
Fifty-Year Development: Construction of Steel Suspension Bridges, James D. Dwyer, CO1:Mar 75:105:11176
Fifty-Year Development Construction of Steel Girder Bridges, Edward A. Burroughs, CO3:Sept 75:463:11549
Fifty-Year Development: Construction of Steel Hybrid Bridges, Ralph F. Trepal, CO4:Dec 75:719:11765
Fifty-Year Development of Naval Facilities Construction, Michael Yachnis, CO1:Mar 75:15:11175
Fifty-Year Development of Upstream Flood-Control Works Construction, Charlie M. Moore, CO3:Sept 75:477:11543
Fifty-Year Developments in High Strength Concrete, Colin D. Johnston, CO4:Dec 75:801:11757
Fifty-Year Highlights of Tunneling Equipment, David A. Day and Bradford P. Boisen, CO2:June 75:265:11393
Fifty-Year History of Movable Bridge Construction - Part I, Egbert R. Hardesty, Henry W. Fischer and Richard W. Christie, CO3:Sept 75:511:11565
Fifty-Year History of Movable Bridge Construction-Part II, Egbert R. Hardesty, Henry W. Fischer and Richard W. Christie, CO3:Sept 75:529:11594
Fifty-Year History of Movable Bridge Construction—Part III, Reece H. Wengenroth, Howard A. Mix and Egbert R. Hardesty, CO3:Sept 75:545:11555
Fifty Years of Aluminum in Construction, Cedric Marsh, CO3:Sept 75:583:11591
Fifty Years of Construction Cost-Reducing Analyses, Robert L. Peurifoy, CO2:June 75:299:11371
Fifty Years of Construction Law, Robert A. Rubin, CO4:Dec 75:703:11758
Five Decades of Progress in Pipelining, David R. Williams, Jr., CO4:Dec 75:751:11770
Fort St. Vrain PCRV Bottom Head Construction, Hughes M.G. Nerses and Clyde B. Tatum, CO2:June 75:391:11394
Foundation Considerations for a Nuclear Power Plant, George A. Faillace, CO1:Mar 75:165:11181
Gap-Graded Concrete for Paving Construction, Ram Kinkar Ghosh and Mukul Ranjan Chatterjee, CO1:Mar 76:227:11988
Gates' Bidding Model—A Monte Carlo Experiment, Marvin Gates, CO4:Dec 76:669:12631
Goals for Education and Research in Construction, Boyd C. Paulson, Jr., CO3:Sept 76:479:12393
Half Century of USBR Arch Dam Construction, James R. Graham, James Legas and Ernest A. Lindholm, CO2:June 75:281:11387
Handling Concrete—Then and Now, Joseph J. Waddell, CO4:Dec 75:819:11779
Hardinge Bridge Span Repair, Amitabha Ghosal, Jagadish C. Ganguly, Himangsu K. Banerjee and Mahesh P. Kapoor, CO4:Dec 74:631:11034
Helicopter-Erected Tower Crane Demolishes Buildings, Charles R. Schrader, CE:May 75:60
Historical Sites and the Construction Engineer, Mario G. Salvadori, CO2:June 76:295:12183
A History of Bureau of Reclamation Construction-Part I, Harold G. Arthur, CO1:Mar 75:51:11189
A History of Bureau of Reclamation Construction-Part II, Harold G. Arthur, CO1:Mar 75:69:11190
A History of Joints in Concrete Pavements, John P. Cook, CO1:Mar 75:29:11201
Human Factors in the Constructed Environment, H. McIlvaine Parsons, EFAN:Dec 74:93
In-Place Evaluation of Concrete, V. Mohan Malhotra, CO2:June 75:345:11354
Integrated Contracting Systems, Abraham Warszawski, CO1:Mar 75:213:11199
Integrated System for Production of Joists, A. Murray Lount and Sidney H. Simmonds, ST4:Apr 75:807:11242
The Interstate Era of Highway Construction, Wesley S. Mendenhall, Jr., Preprint No.2793, Sept 76, 21pp.
An Introduction to Fifty Years of Tunneling, Robert S. Mayo, CO2:June 75:259:11348
Job Dissatisfactions in Construction Work, John D. Borcherding and Clarkson H. Oglesby, CO2:May 75:415:11390
Laminated Timber Logging Bridges in British Columbia, Richard G. Scarisbrick, ST1:Jan 76:19:11832
Learning and Experience Curves, Marvin Gates and Amerigo Scarpa, CO1:Mar 72:79:8778
Legal Aspects of Open Cut Construction, Louis Cantor, Robert A. Rubin and Eugene H. Goldberg, CO4:Dec 75:923:11767
Liner-Medium Interaction in Tunnels, Bijan Mohraz, Alfred J. Hendron, Jr., Randall E. Ranken and Mohammad H. Salem, CO1:Mar 75:127:11174
LOMARK: A Bidding Strategy, Richard Louis Wade and Robert B. Harris, CO1:Mar 76:197:11961
Long Line Production of Building Elements in United States, Ross H. Bryan, CO1:Mar 75:143:11188
Maintenance of Services during Construction, Claude Cossette and Ernest Zbinden, CO1:Mar 75:155:11186
Management Issues in the U.S. Construction Industry, Janet Ann Koch Rossow and Fred Moavenzadeh, CO2:June 76:277:12184
Manpower Use in High-Rise Residential Construction, Ira H. Kleinfeld, CO2:June 76:379:12178
Marketing's Role in Construction Firms, Richard M. Bessom, CO3:Sept 75:647:11592
Measuring Quality of Constructions with Man as the Measure, Ronald W. Petersen, EFAN:Dec 74:70
Minimum Cost Design of Elevated Transit Structures, Antoine E. Naaman and Marshall L. Silver, CO1:Mar 76:99:11986
Modeling Method Productivity, James J. Adrian and LeRoy T. Boyer, CO1:Mar 76:197:11983
New Methods in Construction Systems, R. Richard LeVitt, CO3:Sept 74:211:10788
The New Montreal International Airport, G. Y. Sebastyan, CO2:June 75:317:11346
On Bidding—A Dynamic Model with One Competitor, Fletcher H. Griffis, Preprint No.2709, Apr 76, 28pp.
Optimum Size of Equipment, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:861:11772
Optimum Size of Hauling Units, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:853:11771

Optimum Use of Pretensioning, Post-Tensioning, and Two-Way Prestressing, Narindar Bhandari, TN: CO2:June 76:403:12167
OSHA Trenching and Shoring Standards, George E. Mason and Steven Shimp, CO2:June 75:377:11377
Past and Future of Concrete Quality Control, Venkataswamy Ramakrishnan, CO2:June 76:263: 12187
Past and Future of Construction Equipment — Part I, Franklin J. Larkin and Stuart Wood, Jr., CO2: June 75:309:11391
Past and Future of Construction Equipment — Part II, Edwin H. Klump, CO4:Dec 75:689:11777
Past and Future of Construction Equipment — Part III, James Douglas, CO4:Dec 75:699:11778
Past and Future of Contract Administration, Woodrow W. Wilson, CO3:Sept 75:559:11560
Past 50-Year Development of Constructional Steels, Ralph D. Webb, John A. Gilligan and Roland M. Brown, CO4:Dec 75:785:11753
Professional Construction Management, Donald S. Barrie and Boyd C. Paulson, Jr., CO3:Sept 76:425: 12394
Pueblo Dam - A Bureau of Reclamation First, Harold G. Arthur, CE:July 75:70
The Quality System in Construction, Edward A. Abdun-Nur, EFAN:Dec 74:2
Recent Results in French Research on Reinforced Earth, Francois Schlosser and Nguyen-Thanh-Long, CO3:Sept 74:223:10800
Recommended Standards for the Responsibility, Authority, and Behavior of the Inspector, Joseph Goldbloom, Chmn., CO2:June 75:359:11384
Reducing Construction Accidents—Top Management's Role, Raymond E. Levitt and Henry W. Parker, CO3:Sept 76:465:12384
Repair of Earthquake Damaged Underground Reservoir, Daniel J. Smith, Jr., CO3:Sept 74:449: 10825
Rigid and Flexible Bracing Systems on Adjacent Sites, Richard G. Tait and Henry T. Taylor, CO2: June 75:365:11376
Role of Contract and Specifications in Foundations Construction, Max E. Greenberg, CO2:June 74:113: 10607
Seasonal Effects on Building Construction, David Morris, CO1:Mar 76:29:11989
Session V —Ecology, C. Leland Rogers, EFEEC:Aug 75:417
Simulation Model for Tunnel Construction Costs, Fred Moavenzadeh and Michael J. Markow, CO1: Mar 76:51:11967
Social and Environmental Concerns in Construction, Robert F. Borg, CO1:Mar 76:1:12007
Social and Environmental Costs in Construction, Enno Koehn, CO4:Dec 76:593:12599
Some Applications of Prestressing in Foundation Construction, Ingvar Schousboe, CO2:June 75:403: 11395
Some Construction Aspects of Tarbela Dam, Morgan H. Thompson, CO3:Sept 74:247:10799
Specifications—Design Professionals' Forgotten Challenge, Edward R. Fisk, CO2:June 76:303:12171
Stability of Trenches Filled with Fluids, Kevin L. Nash, CO4:Dec 74:533:11006
Summary — Case Study of Dallas/Fort Worth Airport, Jack D. Downey, EFAN:Dec 74:165
Summary for the Keynote Session I - The Quality System in Construction, Wayne D. Veneklasen, EFAN:Dec 74:246
The Superdome Foundation, Thor L. Anderson and Melvin C. Williams, CO1:Mar 76:81:11971
Tied-Back Deep Excavations in Los Angeles Area, Perry A. Maljian and James L. Van Beveren, CO3: Sept 74:337:10791
Time-Dependent Stresses in Continuous Precast Bridges, Walter H. Dilger and Amin Ghali, CO1: Mar 76:239:11964
Tunnel and Shaft Sealing Methods Using Polyvinyl Chloride Sheet, Antonio Peduzzi, CO1:Mar 76:111: 11966
Urban Sediment Problems: A Statement on Scope, Research, Legislation and Education, Harold P. Guy, Chmn., HY4:Apr 75:329:11256
Uses of Cold-Formed Steel in Construction on Rise, CE:Feb 76:18
Ventura City Hall Restoration, James Warner, CO1: Mar 76:119:11970
VPM Scheduling for High-Rise Buildings, James J. O'Brien, CO4:Dec 75:895:11773
What Has ASCE Done for Me Lately, William M. Sangster, CE:Oct :80
180-Ft. x 1000-Ft. Shipbuilding Dock for National Steel and Shipbuilding Company, Ronald A. Dahlin, Preprint No.2671, Apr 76, 15pp.

Construction Costs

Analysis of Dredging Projects, William B. Pearce, DIEE:Jan 76:139
Desperate Need to Slash Construction Cost of New Subways, Eugene E. Dallaire, CE:Dec 76:37
The Effect of Regulations on Productivity as Viewed by the Engineer, Billy T. Sumner, PROD:Aug 76: 219
Energy Conservation in Housing Construction, John A. Lepore, Noam Lior and Sidney Shore, Preprint No.2781, Sept 76, 30pp.
Fifty Years of Construction Cost-Reducing Analyses, Robert L. Peurifoy, CO2:June 75:299:11371
Optimizing Capital Investments in Construction, Donn E. Hancher and David K. Gebert, CO4:Dec 76:629:12606
Productivity and the Construction Grants Program for Wastewater Treatment Works: An EPA View, Harold P. Cahill, Jr., PROD:Aug 76:205
Project Communication and the Washington Metro System, William S. Alldredge, PROD:Aug 76:153
Regulation/Strangulation — Contractor's Viewpoint, J. A. Judge, PROD:Aug 76:239

Construction Equipment

Dialog · Between Engineers: Designers, Contractors, Manufacturers, CE:Dec 75:65
Diaphragm Wall Construction Techniques, Kevin L. Nash, CO4:Dec 74:605:11025
The Effect of Regulations on Productivity, J. C. Turner, PROD:Aug 76:257
Fifty-Year Advancement in Concrete Bridge Construction, Tung. Y. Lin and Felix Kulka, CO3: Sept 75:491:11558
A Half-Century of Cold-Regions Construction, F. Lawrence Bennett, CO4:Dec 75:839:11780
Handling Concrete—Then and Now, Joseph J. Waddell, CO4:Dec 75:819:11779
Importance of Groove Spacing in Tunnel Boring Machine Operations, Parviz F. Rad, GT9:Sept 75: 949:11589
The Interstate Era of Highway Construction, Wesley S. Mendenhall, Jr., Preprint No.2793, Sept 76, 21pp.
New Method· in Construction Systems, R. Richard LeVitt, CO3:Sept 74:211:10788
New Productivity Improvement Strategies for the Engineering/Construction Industry, Arnold S. Judson, PROD:Aug 76:49
Northern Off-Road Transportation in the 70's, I. A. Thomas, CO3:Sept 75:635:11573
Optimum Size of Equipment, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:861:11772
Optimum Size of Hauling Units, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:853:11771
Past and Future of Construction Equipment — Part I, Franklin J. Larkin and Stuart Wood, Jr., CO2: June 75:309:11391
Past and Future of Construction Equipment — Part II, Edwin H. Klump, CO4:Dec 75:689:11777
Past and Future of Construction Equipment — Part III, James Douglas, CO4:Dec 75:699:11778
Recent Developments in Underwater Construction, Philip K. Rockwell, Preprint No.2669, Apr 76, 28pp.
Slipform Pavers Prove Their Versatility, Gordon K. Ray, Edwin C. Lokken and Robert G. Packard, TE4:Nov 75:721:11725
Some Construction Aspects of Tarbela Dam, Morgan H. Thompson, CO3:Sept 74:247:10799

Construction Industry
Australian Metrication and the Engineer, Carter H. Harrison, Jr., EI2:Apr 76:199:12088
Canadian University to Launch Building-Engineering Program, Alan D. Russell and Paul P. Fazio, CE: Apr 75:86
Concepts of Project Planning and Control, Boyd C. Paulson, Jr., CO1:Mar 76:67:11984
Construction Helmet Response Under Severe Impact, Werner Goldsmith, CO2:June 75:335:11349
A Construction Industry R&D Incentives Program, Donald C. Taylor, Joseph C. Kellogg and Michael C. Wilkinson, EI3:July 76:369:12271
The Construction Manager's Impact on Productivity, Edward W. Peterson, PROD:Aug 76:99
Education for Construction, Albert G.H. Dietz and William A. Litle, CO2:June 76:347:12182
Education, Research, and Productivity in Construction, Boyd C. Paulson, Jr., PROD:Aug 76: 187
The Effect of Regulations on Productivity, J. C. Turner, PROD:Aug 76:257
Goals for Education and Research in Construction, Boyd C. Paulson, Jr., CO3:Sept 76:479:12393
The Interstate Era of Highway Construction, Wesley S. Mendenhall, Jr., Preprint No.2793, Sept 76, 21pp.
Management Issues in the U.S. Construction Industry, Janet Ann Koch Rossow and Fred Moavenzadeh, CO2:June 76:277:12184
Marketing's Role in Construction Firms, Richard M. Bessom, CO3:Sept 75:647:11592
Methodology of Construction Industry Profiling: A Case History, Mark H. Jordan, EI1:Jan 76:67: 11864
Motivation of Construction Workers, Craig S. Hazeltine, CO3:Sept 76:497:12376
New Productivity Improvement Strategies for the Engineering/Construction Industry, Arnold S. Judson, PROD:Aug 76:49
OSHA Trenching and Shoring Standards, George E. Mason and Steven Shimp, CO2:June 75:377:11377
Past and Future of Construction Equipment — Part II, Edwin H. Klump, CO4:Dec 75:689:11777
Professional Construction Management, Donald S. Barrie and Boyd C. Paulson, Jr., CO3:Sept 76:425: 12394
Regulation/Strangulation — Contractor's Viewpoint, J. A. Judge, PROD:Aug 76:239
Survival in the Legal Jungle, Frederick J. Richards, Jr., Preprint No.2761, Sept 76, 4pp.

Construction Management
Analysis of Activity Networks under Uncertainty, Alfredo H-S. Ang, Jamal Abdelnour and Amal A. Chaker, EM4:Aug 75:373:11514
Building Construction Management Game, Kenneth F. Reinschmidt, James W. Litchfield and Steven D. Hunt, EI2:Apr 75:117:11248
Conceptual RMC/Time Synthesis, Marvin Gates and Amerigo Scarpa, CO2:June 76:307:12181
Construction Information Systems in Romania, Daniel W. Halpin and Nicolai Tutos, CO2:June 76: 335:12176
The Construction Manager's Impact on Productivity, Edward W. Peterson, PROD:Aug 76:99
Construction Productivity — How to Improve It, CE: Oct 76:57
CONSTRUCTO — An Interactive Gaming Environment, Daniel W. Halpin, CO1:Mar 76:145: 11969
Contractor Quality Control, Joseph C. Dean, Robert I. Carr and Walter L. Meyer, CO3:Sept 76:535: 12422
Contractual Relationships in Construction, Stephen E. Smith, Woodrow W. Wilson, William C. Burns and Robert A. Rubin, CO4:Dec 75:907:11776
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., Preprint No.2643, Apr 76, 10pp.
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., CO4:Dec 76:587:12600
Education for the Professional Construction Manager, Mark H. Jordan and Robert I. Carr, CO3:Sept 76: 511:12392
Education, Research, and Productivity in Construction, Boyd C. Paulson, Jr., PROD:Aug 76: 187
Empire State: Greatest of All Skyscrapers, CE:July 76:65
Improving Productivity in Industrial Construction, John D. Borcherding, CO4:Dec 76:599:12595
Job Dissatisfactions in Construction Work, John D. Borcherding and Clarkson H. Oglesby, CO2:May 75:415:11390
Management Careers for Engineers, Harold G. Evans, EI4:Oct 76:409:12497
Management Issues in the U.S. Construction Industry, Janet Ann Koch Rossow and Fred Moavenzadeh, CO2:June 76:277:12184
Management Processes and Their Affect on Productivity, Chris F. Woods, PROD:Aug 76:113
Marketing's Role in Construction Firms, Richard M. Bessom, CO3:Sept 75:647:11592
The New Montreal International Airport, G. Y. Sebastyan, CO2:June 75:317:11346
Professional Construction Management, Donald S. Barrie and Boyd C. Paulson, Jr., CO3:Sept 76:425: 12394
Project Delivery Systems for Construction Projects, Kenath A. Kettle, CO4:Dec 76:575:12594
Staff Versus Administration Versus Board or the Planning Process Organized for Consensus Instead of Conflict, James Falick, David Burdick and Henry Winkelman, Preprint No.2701, Apr 76, 23pp.
The Systems Approach and Construction Management, Stanley Goldhaber, PROD:Aug 76:71
VPM Scheduling for High-Rise Buildings, James J. O'Brien, CO4:Dec 75:895:11773

Construction Management Award
1976 Construction Management Award Presented to James J. O'Brien, CE:Oct 76:100

Construction Materials
Deck Slab Repaired by Fibrous Concrete Overlay, Ernest K. Schrader and Anthony V. Munch, CO1: Mar 76:179:11976
The Interstate Era of Highway Construction, Wesley S. Mendenhall, Jr., Preprint No.2793, Sept 76, 21pp.
Materials and Specification for Marine Structures, D. L. Frisby, OE75:June 75:818
Method of Developing Optimum Tolerances, Emilio Rosenblueth and Alejandro Asfura, ST2:Feb 76: 323:11889
New Methods in Construction Systems, R. Richard LeVitt, CO3:Sept 74:211:10788
Performance Requirements for Fireproofing Materials, Lawrence G. Seigel, EM3:June 74:489: 10598
Practical Refuse Recycling, C. Edward Walter, EE1: Feb 76:139:11941
Synthetic Aggregate From Incinerator Residues, Horace R. Blank, EM1:Feb 76:31:11898

Construction Methods
Project Delivery Systems for Construction Projects, Kenath A. Kettle, CO4:Dec 76:575:12594

Construction *Planning*
Analysis of Activity Networks under Uncertainty, Alfredo H-S. Ang, Jamal Abdelnour and Amal A. Chaker, EM4:Aug 75:373:11514

Construction Practices
Canadian University to Launch Building-Engineering Program, Alan D. Russell and Paul P. Fazio, CE: Apr 75:86

Construction Procedure
Bailey's Crossroads Collapse Reviewed, Ingvar Schousboe, CO2:June 76:365:12186
Composite Construction Methods, John P. Cook, CO1:Mar 76:21:11975
Conceptual RMC/Time Synthesis, Marvin Gates and Amerigo Scarpa, CO2:June 76:307:12181

Concrete Structures for Subsea Oil Recovery — Design Considerations, Everald V. Wright and Marcel Gerbault, Preprint No.2675, Apr 76, 21pp.
Construction of Large Prestressed Concrete Girders, J. Neil Mustard and Ram S. Ghosh, CO4:Dec 74: 507:10994
Construction of Pueblo Dam, John W. Larson, CO4: Dec 75:883:11769
Curved Diaphragm Cellular Cofferdams, Jerome J. Cushing and Robert M. Moline, GT10:Oct 75:1055: 11669
Environmentally Sensitive Construction Procedures, Austin H. Emery, CE:Mar 75:87
Fifty-Year Development — Construction of Steel Truss Bridges, Lawrence N. Bigelow, CO2:June 75: 239:11381
Fort St. Vrain PCRV Bottom Head Construction, Hughes M.G. Nerses and Clyde B. Tatum, CO2: June 75:391:11394
A Half-Century of Cold-Regions Construction, F. Lawrence Bennett, CO4:Dec 75:839:11780
Helicopter-Erected Tower Crane Demolishes Buildings, Charles R. Schrader, CE:May 75:60
Historical Sites and the Construction Engineer, Mario G. Salvadori, CO2:June 76:295:12183
Integrated Contracting Systems, Abraham Warszawski, CO1:Mar 75:213:11199
The Interstate Era of Highway Construction, Wesley S. Mendenhall, Jr., Preprint No.2793, Sept 76, 21pp.
Maintenance of Services during Construction, Claude Cossette and Ernest Zbinden, CO1:Mar 75:155: 11186
Marseilles Lock Rehabilitation: Illinois Waterway, James P. Jones and Ralph E. Houck, WW76:Aug 76:249
Measurements and Evaluation of Building Response to Ground Motion at Various Stages of Construction, Kenneth K. Honda, ST76:Aug 76:403
Meeting the Challenge of Constructing a Reservoir Bypass Pipeline, Duane D. Buchholz and Roger T. Menlove, Preprint No.2644, Apr 76, 19pp.
Method for Minority Contractor Participation, Ariel E. Morelli, CO3:Sept 76:449:12373
New and Conventional Engineering Uses of Fly Ash, Ramesh C. Joshi, Donald M. Duncan and Howard M. McMaster, TE4:Nov 75:791:11730
Past and Future of Construction Equipment — Part II, Edwin H. Klump, CO4:Dec 75:689:11777
Repair of Earthquake Damaged Underground Reservoir, Daniel J. Smith, Jr., CO3:Sept 74:449: 10825
Segmental Bridges in Oregon, Louis F. Pierce, TE4: Nov 76:673:12548
Slipform Pavers Prove Their Versatility, Gordon K. Ray, Edwin C. Lokken and Robert G. Packard, TE4:Nov 75:721:11725
Ventura City Hall Restoration, James Warner, CO1: Mar 76:119:11970

Construction Sites

Controlling Runoff from Construction Sites, Eugene E. Dallaire, CE:Oct 76:73
Summary — Case Study of Dallas/Fort Worth Airport, Jack D. Downey, EFAN:Dec 74:165

Consultants

Identifying Your Client, William L. Grecco and Thomas A. Dames, EI4:Oct 75:485:11663
New Approach to Site Selection Studies, W. Ray Seiple, PO1:July 74:63:10643

Consulting Engineers

The Agency, The Owner, and The Engineer, in Texas, Noble J. Campbell, EFRLD:Sept 75:99
Conglomerate Takeover of Consulting Firms: An Opinion, Michael N. Goodkind, CE:Sept 75:111
Developing and Maintaining Client Relationship in the Marketing of Engineering Services, Arnold Olitt, CE:June 76:66
Liability of Consultants in Dam Investigations, Gardner M. Reynolds, EFRLD:Sept 75:157
1975 ASCE Salary Survey, Schaefer J. Dixon, Chmn., EI2:Apr 76:225:12090

Consulting Services

A Statement on Professional Services—Competitive Bidding, Gerald L. Devlin, EI1:Jan 75:53:11082

Contacting

Analysis of Unilateral Contact Problem, Panagiotos D. Panagiotopoulos, TN: EM5:Oct 76:921:12443
Optimal Design of Chlorination Systems, Madhav L. Tikhe, EE5:Oct 76:1019:12487

Contact Pressure

Analysis of Unilateral Contact Problem, Panagiotos D. Panagiotopoulos, TN: EM5:Oct 76:921:12443
FE Analyses of Rafts on Viscoelastic Foundations, Yang H. Huang, NMG:June 76:I-463
Some Finite Element Solutions in the Dynamics of Circular Footings, S. P. Dasgupta and N. S.V. Kameswara Rao, NMG:June 76:II-1038

Containment

Statistical Aspects of Containment Tendon Surveillance, Mahendra P. Singh and Adolf Walser, PO1:July 75:23:11406

Containment Vessels

Construction of FFTF Containment Vessel and Lock, Robert N. Lebre, CO2:June 76:325:12177
Construction of Post-Tensioned PWR Containments, Kurtz L. Paulson, CO1:Mar 76:213:11981
Containment Vessel Design —ASME Section III Division 1 Versus Division 2, Norman W. Edwards, STN75:Dec 75:II-361
Liner Anchorage Tests, Edwin G. Burdette and Larry W. Rogers, ST7:July 75:1455:11432
Structural Design of Nuclear Plant Facilities, John D. Stevenson, Chmn., SDNPF:Dec 73

Contaminants

Porous Breakwater for Circulation Study of Harbors, G. Mavrigian and Simsek Sarikelle, OE75:June 75: 668

Contamination

Equalization of Flow Variations in Combined Sewers, Lars-Eric Janson, Stein Bendixen and Anders Harlaut, EE6:Dec 76:1139:12596
Status of NOAA's Ocean Dumping Research in the New York Bight, R. Lawrence Swanson, Preprint No.2690, Apr 76, 30pp.

Continental Shelf

Development of the Continental Shelf, William S. Gaither, Preprint No.2813, Sept 76, 9pp.
Environmental Baseline Study on the Continental Shelf off the New York Bight, Geraldine V. Cox, Preprint No.2655, Apr 76, 20pp.
International Law and Superport Development, Amos C. Dawson, OE75:June 75:1462
Legal-Institutional Framework for the Continental Shelf, Paul O. Bleecker, OE75:June 75:1437
Monitoring Sludge Disposal — Mid-Atlantic Shelf, Geraldine V. Cox, Steven A. Townsend and Priya Wickramarante, OE75:June 75:1314
Technique to Develop Atlantic OCS Oil and Gas, W. B. Bleakley, OE75:June 75:830

Continuing Education

Conventional Versus Integrated Courses in Structural Analysis and Design, William G. Murphy and William J. Hall, ST76:Aug 76:997
Current and Proposed Construction Research Studies, John D. Borcherding and Brennon P. Hatley, CO3: Sept 76:547:12423
Current Competence: Current Dilemma, Virginia Fairweather, CE:July 75:50
Education for the Professional Construction Manager, Mark H. Jordan and Robert I. Carr, CO3:Sept 76: 511:12392
Enlightened Employers' Continuing Education Policies, John P. Klus, Lowell B. Jackson and C. Allen Wortley, EI3:July 75:419:11428
Goals for Education and Research in Construction, Boyd C. Paulson, Jr., CO3:Sept 76:479:12393

A Home-Study Program on Civil Engineering Management, Kenneth P. Buchert, CE:Mar 75:81
Presidential Address, Arthur J. Fox, Jr., EI3:July 76: 315:12263
Recommendations for Environmental Engineering Education, Wesley O. Pipes, EE2:Apr 74:243:10459
Responding to Our Members' Educational Needs, Edward W. Timmons, Jr., EI1:Jan 76:41:11869
Trends in P.E. License Renewal Requirements, Robert D. Reckert, EI4:Oct 75:449:11667
University of Wisconsin: A Success Story in Continuing Engineering Education, CE:Sept 75:101

Continuous Beams
A Direct Solution of Continuous Beams, Chang-Ning Sun, CE:Sept 76:97
Plastic Rotations in Continuous Encased Beams, Subhash Chandra Maiti, ST6:June 75:1269:11375

Continuous Flow Models
Effects of Temperature and Kelthane on Grass Shrimp, Siamak Khorram and Allen W. Knight, EE5:Oct 76:1043:12475

Continuous Structures
Continuous Plate Analysis by Finite Panel Method, Richard M. Gutkowski and Chu-Kia Wang, ST3: Mar 76:629:12002
Incremental Stress-Strain Relationship for Cohesionless Soil, F. Darve, S. Labanieh and R. Chambon, NMG:June 76:I-264
Load Factor Design of Continuous-Span Bridges, Conrad P. Heins and Alan D. Kurzweil, ST6:June 76:1213:12219

Continuum Hypothesis
Beam Analog for Plate Elements, M. Ezzat Mohsin and Edward E. Sadek, ST1:Jan 76:125:11844
Continuum Method for Overall Stability of Tall Asymmetric Buildings, Ari Danay, Menachem Gellert and Jacob Gluck, ST12:Dec 75:2505:11761

Continuum Mechanics
FE Analyses of Rafts on Viscoelastic Foundations, Yang H. Huang, NMG:June 76:I-463
Projectile Penetration of Elastic-Plastic Earth Media, Lewis Thigpen, GT3:Mar 74:279:10414

Contract Administration
Contractual Relationships in Construction, Stephen E. Smith, Woodrow W. Wilson, William C. Burns and Robert A. Rubin, CO4:Dec 75:907:11776

Contracted Services
Engineering Services for Construction, Altaf Hussain, CO3:Sept 74:273:10787

Contraction
Design for Differential Movement in Brick Walls, Clayford T. Grimm, ST11:Nov 75:2385:11739

Contractors
Are Contractors Treated Fairly?, George A. Fox and Max E. Greenberg, CE:May 75:56
The Construction Manager's Impact on Productivity, Edward W. Peterson, PROD:Aug 76:99
Contractual Relationships in Construction, Stephen E. Smith, Woodrow W. Wilson, William C. Burns and Robert A. Rubin, CO4:Dec 75:907:11776
Dialog Between Engineers: Designers, Contractors, Manufacturers, CE:Dec 75:65
An Engineer Rebuts a Contractor's Charges of Unfair Contracts, Sidney Zecher, CE:Oct 75:75
Excelling as a Construction Contractor, Altaf Hussain, CO4:Dec 74:621:11029
Method for Minority Contractor Participation, Ariel E. Morelli, CO3:Sept 76:449:12373
Regulation/Strangulation — Contractor's Viewpoint, J. A. Judge, PROD:Aug 76:239
Role of Contract and Specifications in Foundations Construction, Max E. Greenberg, CO2:June 74:113: 10607

Contracts
The Adopted ASCE Guide to Turnkey Construction Contracts, David L. Narver, Jr., EI2:Apr 75:235: 11249
The Adopted ASCE Guide to Turnkey Construction Contracts, David L. Narver, Jr., EI2:Apr 75:235: 11249
Contractor Quality Control, Joseph C. Dean, Robert I. Carr and Walter L. Meyer, CO3:Sept 76:535: 12422
Contractual Relationships in Construction, Stephen E. Smith, Woodrow W. Wilson, William C. Burns and Robert A. Rubin, CO4:Dec 75:907:11776
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., Preprint No.2643, Apr 76, 10pp.
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., CO4:Dec 76:587:12600
An Engineer Rebuts a Contractor's Charges of Unfair Contracts, Sidney Zecher, CE:Oct 75:75
Fifty Years of Construction Law, Robert A. Rubin, CO4:Dec 75:703:11758
Formula for Markup for Profit, Marvin Gates and Amerigo Scarpa, TN: CO4:Dec 76:685:12590
Integrated Contracting Systems, Abraham Warszawski, CO1:Mar 75:213:11199
Kickbacks Versus Professional Ethics, Russel C. Jones, EI3:July 75:357:11420
On Bidding—A Dynamic Model with One Competitor, Fletcher H. Griffis, Preprint No.2709, Apr 76, 28pp.
Past and Future of Contract Administration, Woodrow W. Wilson, CO3:Sept 75:559:11560
Professional Construction Management, Donald S. Barrie and Boyd C. Paulson, Jr., CO3:Sept 76:425: 12394
Project Delivery Systems for Construction Projects, Kenath A. Kettle, CO4:Dec 76:575:12594
Pueblo Dam - A Bureau of Reclamation First, Harold G. Arthur, CE:July 75:70
Role of Contract and Specifications in Foundations Construction, Max E. Greenberg, CO2:June 74:113: 10607
Specifications—Design Professionals' Forgotten Challenge, Edward R. Fisk, CO2:June 76:303:12171
Survival in the Legal Jungle, Frederick J. Richards, Jr., Preprint No.2761, Sept 76, 4pp.

Contract Terms
The Adopted ASCE Guide to Turnkey Construction Contracts, David L. Narver, Jr., EI2:Apr 75:235: 11249
Integrated Contracting Systems, Abraham Warszawski, CO1:Mar 75:213:11199
Protecting Your Firm against Liability Claims, Sidney Robin and Joseph R. Syrnick, CE:June 75:66

Control
Man-Induced Changes of Middle Mississippi River, Michael A. Stevens, Daryl B. Simons and Stanley A. Schumm, WW2:May 75:119:11281
Water Quality Planning Strategy, George R. Grantham and Thomas E. Bailey, WR1:Apr 76:11: 12060

Control Equipment
Diary of a Sick Control System, Robert L. Hardison, CE:May 75:68

Control Structures
Flow Regulation Effects on Stream Flow Prediction, Carl Mark Koch, WW76:Aug 76:627

Control Surveys
Bridge Construction Surveying, Ray W. Burgan, Jr., CO2:June 74:105:10602
Corner Restoration in Missouri, Norman L. Brown, SU1:Oct 75:101:11658
History of Geodetic Networks, James R. Plasker, SU1:Dec 76:21:12612
Horizontal Control in Kansas City by State Plane Coordinates, Don D. Hurlbert and J. Douglas McDonald, SU1:Dec 76:9:12598
Pressure Effects on Great Lakes Vertical Control, Frank H. Quinn, SU1:Dec 76:31:12605

Control Systems
Control of Gas Flow from Sanitary Landfills, Houshang Esmaili, EE4:Aug 75:555:11525
Diary of a Sick Control System, Robert L. Hardison, CE:May 75:68
Flow Control and Transients in the California Aqueduct, Haywood C. Dewey, Jr. and Welby R. Madsen, IR3:Sept 76:335:12434
Modal Control of Multistory Structures, Charlesworth R. Martin and Tsu T. Soong, EM4: Aug 76:613:12321

Control Theory
Application of Optimal Control Theory to Civil Engineering Structures, Jann-Nan Yang, EM6:Dec 75:819:11812
Optimization in Trusses Using Optimal Control Theory, Narasingam M. Singaraj and Jawalker K. Sridhar Rao, ST5:May 75:1037:11304

Conversion
Availability of Water for Coal Conversion, Phil Q. Gibbs, WR2:Nov 76:219:12540

Conveyors
Steel Stress-Ribbon Concept — Will It Save Money?, Robert J. Wheen, CE:May 76:74

Convolution Integrals
A Numerical Solution for Viscoelastic Half Planes, Gautam Dasgupta, EM4:Aug 76:601:12325

Cooling Systems
Analysis and Interpretation of a Heated Jet, H. H. Carter, Donald W. Pritchard and S. R. Rives, OE75:June 75:1420
Cooled Seawater Discharge in Harbor Environment, Yuan Jen and Richard B. Dornhelm, OE75:June 75:1362
Dry-Wet Tower Evaporation and Fog Psychometrics, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:21:11828
Economics of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO2:Nov 76:147:12515
Hydraulic Modeling of Shallow Cooling Ponds, Jean-Claude Tatinclaux, Subhash C. Jain and William W. Sayre, PO1:July 75:43:11415
Nuclear Power Plant Cooling System Selection, Stephen C. Ko, PO1:July 75:55:11405
Thermodynamic Models of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:1:11829

Cooling Towers
Buckling of Cooling-Tower Shells: Bifurcation Results, Peter P. Cole, John F. Abel and David P. Billington, ST6:June 75:1205:11365
Buckling of Cooling-Tower Shells: State-of-the-Art, Peter P. Cole, John F. Abel and David P. Billington, ST6:June 75:1185:11364
Design of Cooling Towers for Wind, David P. Billington and John F. Abel, ST76:Aug 76:242
Gust Factors for Hyperbolic Cooling Towers, Mahendra P. Singh and Ajaya K. Gupta, ST2:Feb 76:371:11894
Mean Wind Loading on Rough-Walled Cooling Towers, Cesar Farell, Oktay Guven and Federico Maisch, EM6:Dec 76:1059:12647
Stability and Dynamic Analyses of Cooling Tower, Chang-hua Yeh and William Y.J. Shieh, PO2:Nov 73:339:10141
Stability of Hyperboloidal Shells, Daniel R. Veronda and Victor I. Weingarten, ST7:July 75:1585:11446
Thermal Loading of Thin-Shell Concrete Cooling Towers, Richard D Larrabee, David P. Billington and John F. Abel, ST12:Dec 74:2367:11002

Cooling Water
Analysis and Interpretation of a Heated Jet, H. H. Carter, Donald W. Pritchard and S. R. Rives, OE75:June 75:1420
Cooled Seawater Discharge in Harbor Environment, Yuan Jen and Richard B. Dornhelm, OE75:June 75:1362
Makeup Requirements for Cooling Ponds, John C. Sonnichsen, Jr., EE1:Feb 75:15:11114
River and Cooling Water Temperature Fluctuations, Heinz Stefan and V. Nguyen Chau, HY11:Nov 76: 1613:12514

Cooperation
Dialog Between Engineers: Designers, Contractors, Manufacturers, CE:Dec 75:65
Half a Century of Soil Mechanics—Some Thoughts for the Future in the Light of the Past, Gregory P. Tschebotarioff, EI3:July 76:321:12251

Cooperative Education
Civil Engineering: Education and Practice, Emory L. Kemp, EI1:Jan 76:17:11868
An Employer's Evaluation of Cooperative Education, Robert W. Richards, EI2:Apr 75:221:11238
Engineering Education for Engineering Practice, Cornelius Wandmacher, EI2:Apr 75:227:11250
Unemployment, Public Works, and the 1976 Presidential Election Campaign, Kneeland A. Godfrey, Jr., CE:Oct 76:82
Why A Co-op Program—A Student's Point of View, Douglas J. Marshall, EI2:Apr 75:243:11264

Coordinates
Engineering Surveying: Chapters 2, 5, 6, 8, 16, and 20, George M. Mayfield, Chmn., SU1:Dec 76:59: 12648
Horizontal Control in Kansas City by State Plane Coordinates, Don D. Hurlbert and J. Douglas McDonald, SU1:Dec 76:9:12598

Coordination
Water Quality Planning Strategy, George R. Grantham and Thomas E. Bailey, WR1:Apr 76:11: 12060

Copper
Hydraulic Transport of Copper Tailings, Pablo Kleiman, TN: HY10:Oct 76:1589:12444

Copper Ore Deposits
Finite Element Analysis of Cement Fill Exposures, John L. Meek and R. W. Kirkby, NMG:June 76:II-901

Coral
Hawaii's Offshore Runway, Wayne L. Rickerd, Preprint No.2696, Apr 76, 19pp.

Cores
Analysis of Shear Cores Using Superelements, Barry J. Goodno and James M. Gere, ST1:Jan 76:267: 11837
Behavior of Compacted Soil in Tension, Abbanki V. Gopala Krishnayya, Zdenek Eisenstein and Norbert R. Morgenstern, GT9:Sept 74:1051:10828
Stability of Shells Attached to An Elastic Core, Victor I. Weingarten and Yuan S. Wang, EM5:Oct 76:839:12492
Torsional Analysis of Perforated Core Structure, Avigdor V. Rutenberg and Wai K. Tso, ST3:Mar 75:539:11167

Core Samples
Analysis of Oxygen Demand of Sediments, J. Clement Burdick, III, DIEE:Jan 76:319

Coring
Coring the Deep Oceans for Science, Robert R. Knapp and Valdemar F. Larson, OE75:June 75:784
Deepsea Drilling Workshop, Jared L. Black and Joel M. Goodman, OE75:June 75:846
Rock Strain Recovery — Factor in Foundation Design, T. C. Nichols, Jr. and W. Z. Savage, GT76: Aug 76:34

Corner Joints
Optimum Steel Distribution in Corner Slabs, Ganpat S. Pandit and Subodh C. Sharma, TN: ST12:Dec 76:2360:12593
Reinforced Concrete Corners and Joints Subjected to Bending Moment, Ingvar H.E. Nilsson and Anders Losberg, ST6:June 76:1229:12222

Correlation Analysis
Correlation Analysis of Hydrometeorological Data, Ashok N. Shahane, Daniel Thomas and Paul Bock, HY10:Oct 76:1561:12484

Correlation Techniques
Statistics of Liquefaction and SPT Results, John T. Christian and William F. Swiger, GT11:Nov 75: 1135:11701

Corrosion
The Corrosion of Coated Steel Piles in the Ocean, E. Escalante, W. P. Iverson and W. F. Gerhold, Preprint No.2733, Apr 76, 22pp.
Estimated Indirect Cost of Urban Water Use, Charles H. Lawrance, EE4:Aug 75:517:11482
Polymer-Impregnated Concrete: Field Studies, Harshavardhan C. Mehta, John A. Manson, Wai F. Chen and John W. Vanderhoff, TE1:Feb 75:1: 11103
Practical Proposal for Restoring Manhattan's West Side Highway, Robert Moses, CE:Nov 75:49
Problems in Long-Life Fatigue Assessment for Fixed Offshore Structures, Peter W. Marshall, Preprint No.2638, Apr 76, 24pp.
Proven Organic Coatings for Long Term Protection, Abel Banov, CE:Dec 75:54
Proven Organic Coatings for Long Term Protection — Part II, Abel Banov, CE:Feb 76:64
Research on Titanium Wire Rope for Marine Use, Darrell A. Milburn and Michael Chi, Preprint No.2713, Apr 76, 21pp.
Research on Titanium Wire Rope for Marine Use, Darrell A. Milburn and Michael Chi, ST11:Nov 76: 2137:12535
Steels for the Sea, J. H. Gross, Preprint No.2732, Apr 76, 26pp.

Corrosion Control
Protection of Piles: Steel, Concrete, Wood, Roney A. Heinz, CE:Dec 75:59
Proven Organic Coatings for Long Term Protection, Abel Banov, CE:Dec 75:54
Proven Organic Coatings for Long Term Protection — Part II, Abel Banov, CE:Feb 76:64

Corrosion Fatigue
Steels for the Sea, J. H. Gross, Preprint No.2732, Apr 76, 26pp.

Corrosion Inhibitors
Zinc Paint Can Save $500,000 On Your Powerplant, Dean M. Berger, CE:Oct 76:66

Corrosion Resistance
Fifty Years of Aluminum in Construction, Cedric Marsh, CO3:Sept 75:583:11591

Corrugated Metal Pipes
Flow in Corrugated Pipes, Robert J. Shipton and Harald R. Graze, HY9:Sept 76:1343:12414

Corrugating
Curvilinearly Corrugated Plates in Shear, Lung-Hsiang Wu and Charles Libove, ST11:Nov 75:2205: 11714
Parallel Flow Between Corrugated Plates, Chang-Yi Wang, TN: EM6:Dec 76:1088:12591
Trapezoidally Corrugated Plates in Shear, M. Iqbal Hussain and Charles Libove, ST5:May 76:1109: 12159

Cost Analysis
Economic Pipe Sizing in Pumped Irrigation Systems, Roland P. Perold, IR4:Dec 74:425:10988
Optimizing Economic Return on Highway Investment, Robert L. Carstens, TE4:Nov 76:665: 12529

Cost Comparison
Discounted Cash Flow Analysis to Select Equipment, Richard Briller, EE3:June 76:595:12190

Cost Control
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., CO4:Dec 76:587:12600
Estimation and Control of Construction Labor Costs, Boyd C. Paulson, Jr., CO3:Sept 75:623:11579

Cost Effectiveness
Clean Air Equals Dirty Water, Donald C. Tillman and Robert C. Horii, EE1:Feb 75:87:11125
Cost Effectiveness Maintenance-Management Systems, Gary N. Shofner, TE2:May 76:331:12133
Design and Management of Air Monitoring Surveys, Terry L. Miller and Kenneth E. Noll, EE4:Aug 76: 821:12344
Discounted Cash Flow Analysis to Select Equipment, Richard Briller, EE3:June 76:595:12190
Highway User Benefit/Cost Analysis in California, Heinz Heckeroth and Charles E. Paulsen, TE4:Nov 76:605:12524
Hydraulic Collection and Disposal of Refuse, Jochen Kuhner and Peter M. Meier, EE4:Aug 76:769: 12296
Innovative Design at Florida Bulkhead Reduces Material and Construction Costs, Anthony A. Nolan, CE:May 76:81
Nuclear Power Plant Cooling System Selection, Stephen C. Ko, PO1:July 75:55:11405
Strategies for Alleviating Impact of Aircraft Noise, Adib Kanafani and Abdullah Mogharabi, TE4:Nov 75:657:11715

Cost Engineering
Experts Critique the Olympic Structures of Montreal, CE:Dec 76:50

Cost Estimates
Estimating—State-of-the-Art, Carl A. Erikson and LeRoy T. Boyer, CO3:Sept 76:455:12382
Minimum Cost Design of Elevated Transit Structures, Antoine E. Naaman and Marshall L. Silver, CO1:Mar 76:99:11986
Specifications for Successful Programming Projects, James L. Tocher, ST76:Aug 76:837

Cost Indexes
Estimating—State-of-the-Art, Carl A. Erikson and LeRoy T. Boyer, CO3:Sept 76:455:12382

Cost Minimization
Experts Critique the Olympic Structures of Montreal, CE:Dec 76:50
Optimal Design of Wastewater Collection Systems, J. M. Gupta, S. K. Agarwal and P. Khanna, EE5:Oct 76:1029:12479

Cost Overruns
Experts Critique the Olympic Structures of Montreal, CE:Dec 76:50

Costs
Analysis of Dredging Projects, William B. Pearce, DIEE:Jan 76:139
Approximate Analysis and Economics of Structures, Niels C. Lind, ST6:June 76:1177:12201
Automated Analysis of Standard Buildings, Norman R. Maham, ST4:Apr 75:751:11265
Building and Operating Costs Versus Rental Income, Clayford T. Grimm, EI3:July 76:355:12270
Comparative Study With Costs of Hypolimnetic Aeration, Arlo W. Fast, Marc W. Lorenzen and J. Harlan Glenn, EE6:Dec 76:1175:12629
Competition in the Transportation Industry, Dayle M. Clark and James J. Schwarzwalder, TE3:Aug 76:489:12290
Concepts of Project Planning and Control, Boyd C. Paulson, Jr., CO1:Mar 76:67:11984

The Construction Manager's Impact on Productivity, Edward W. Peterson, PROD:Aug 76:99
Corps Guidelines for Dam Safety Inspection Need Revamping, Bob J. Buehler, CE:Jan 75:74
Cost and Pricing Relationships in Water Supply, Robert M. Clark, EE2:Apr 76:361:12025
Cost Optimization of Rural Water Systems, Robert B. Robinson and T. Al Austin, HY8:Aug 76:1119:12301
Design Lead Time Predictions, Earl Rogers, TE4:Nov 76:737:12569
Desperate Need to Slash Construction Cost of New Subways, Eugene E. Dallaire, CE:Dec 76:37
Dredged Material Disposal: Social Costs and Other Externalities, R. M. Pope, DIEE:Jan 76:398
Energy-Intensive Analysis of Truck Transportation, Balakrishnamurthy Ashtakala, TE2:May 75:225:11289
Environmental Costs — Impact on Dredging, Carl C. Cable and William R. Pearson, DIEE:Jan 76:353
Estimated Indirect Cost of Urban Water Use, Charles H. Lawrance, EE4:Aug 75:517:11482
Estimation and Control of Construction Labor Costs, Boyd C. Paulson, Jr., CO3:Sept 75:623:11579
Evaluating Costs for Port Distribution Systems, Richard G. Waugh, Jr., WW4:Nov 75:385:11723
Future of Sanitary Landfill, Bruce Thompson and Iraj Zandi, EE1:Feb 75:41:11113
Integrated System for Production of Joists, A. Murray Lount and Sidney H. Simmonds, ST4:Apr 75:807:11242
Learning and Experience Curves, Marvin Gates and Amerigo Scarpa, CO1:Mar 72:79:8778
Least Cost Design of Branched Pipe Network System, Arun K. Deb, EE4:Aug 74:821:10711
Marine Alternatives for Rapid Transit in Hawaii, Theodore T. Lee, WW76:Aug 76:107
Mechanical Dredges, Adolph W. Mohr, DIEE:Jan 76:125
Minimum Cost in Residential Refuse Vehicle Routes, Jon C. Liebman, James W. Male and Magne Wathne, EE3:June 75:399:11368
Minimum Cost Selection of One-Way Slab Thickness, Russell H. Brown, ST12:Dec 75:2585:11785
Minimum Cost Versus Minimum Weight of Prestressed Slabs, Antoine E. Naaman, ST7:July 76:1493:12268
Model for Layout and Design of Sewer Systems, Larry W. Mays, Harry G. Wenzel, Jr. and Jon C. Liebman, WR2:Nov 76:385:12580
Modeling Method Productivity, James J. Adrian and LeRoy T. Boyer, CO1:Mar 76:197:11983
New Productivity Improvement Strategies for the Engineering/Construction Industry, Arnold S. Judson, PROD:Aug 76:49
Optimal Substructuring Schemes, Michael O'Rourke and Thomas Bizal, ST76:Aug 76:1037
Optimization of Water Distribution Network Systems, Arun K. Deb, EE4:Aug 76:837:12343
Optimum Size of Hauling Units, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:853:11771
Planning Criteria for Bikeways, Vincent R. Desimone, TE3:Aug 73:609:9928
Regulation/Strangulation — Contractor's Viewpoint, J. A. Judge, PROD:Aug 76:239
Reinforced Earth: A New Alternative for Earth Retention Structures, David S. Gedney and David P. McKittrick, CE:Oct 75:58
Seasonal Effects on Building Construction, David Morris, CO1:Mar 76:29:11989
Session I — Objectives (Introduction), Jan C. Philips, EFEEC:Aug 75:404
Short Span Bridges, Kneeland A. Godfrey, Jr., CE:July 75:42
Simulation Model for Tunnel Construction Costs, Fred Moavenzadeh and Michael J. Markow, CO1:Mar 76:51:11967
Social and Environmental Costs in Construction, Enno Koehn, CO4:Dec 76:593:12599
Specifications—Design Professionals' Forgotten Challenge, Edward R. Fisk, CO2:June 76:303:12171
A Subsurface Drainage Cost and Hydrologic Model, Ashim K. Bhattacharya, Nader Foroud, Sie-tan Chieng and Robert S. Broughton, Preprint No.2773, Sept 76, 18pp.
The Systems Approach and Construction Management, Stanley Goldhaber, PROD:Aug 76:71
Technical Information Processing Systems, William F. Bates, EI2:Apr 75:189:11254
US Water Cleanup Program Speeds Up—But Still Much Red Tape, Eugene E. Dallaire, CE:Aug 75:71
Water Supply Economics, Robert M. Clark, UP1:Aug 76:213:12357

Cotton Plants

Irrigation Timetable Combined with Optimal Operating of an Agricultural Production System, Ilan Amir, Y. Friedman, S. Sharon and A. Ben David, IR76:July 76:192

Counseling

Can We Engineer Vocational Assessment and Counseling for Everyone?, John L. Holland, CE:May 76:92

Couplings

Nonlinear Analysis of Unsymmetrically Laminated Plates, Samir A. Zaghloul and John B. Kennedy, EM3:June 75:169:11345

Court Decisions

Local Land Use Control Over Critical Areas, Charles Thurow, CE:Sept 75:73

Coverings

The Floating Cover: Best Way to Cover a Finished-Water Reservoir?, Eugene E. Dallaire, CE:June 75:75
Tough Pollution Laws Spur Use of Impermeable Liners, Eugene E. Dallaire, CE:May 75:63

Crabs

Effects of Suspended Dredged Material on the Commercial Crab, *Cancer Magister*, Richard Peddicord and Victor McFarland, DIEE:Jan 76:633

Cracking

Cracking Analysis of Reinforced Concrete Plates, Maharaj K Wanchoo and Gerald W. May, ST1:Jan 75:201:11059
Torsional Strength of Prestressed Concrete Beams, H. Roger Woodhead and Arthur E. McMullen, ST5:May 74:881:10545

Cracking (Fracturing)

Fatigue of Periodically Overloaded Stiffener Detail, Ali Abtahi, Pedro Albrecht and George R. Irwin, ST11:Nov 76:2103:12516
Numerical Analysis of Thermal Crack Propagation in Pavement Overlays, H. S. Chang, Robert L. Lytton and S. H. Carpenter, NMG:June 76:1-526

Crack Propagation

Fatigue and Fracture of Bridge Steels, Richard Roberts and George R. Irwin, ST2:Feb 76:337:11913

Cracks

Finite Element Analysis of Wave Diffraction by a Crack, Zdenek P. Bazant, John L. Glazik, Jr. and Jan D. Achenbach, EM3:June 76:479:12220
Interface Shear Transfer and Dowel Action in Cracked Reinforced Concrete Subject to Cyclic Shear, Rafael Jimenez, Philip Perdikaris, Peter Gergely and Richard N. White, ST76:Aug 76:457

Cranes

Analysis of Fatigue of Welded Crane Runway Girders, David A. Demo and John W. Fisher, ST5:May 76:919:12106
Wheel Load Stress Concentrations on Crane Runway Girders, G. J.K. Asmis, ST76:Aug 76:1005

Cranes (Hoists)
Job-Site Innovations Slash Time, Cost of Constructing Canada's Tallest Skyscraper, Keith E. Roberts, CE:Aug 76:42

Creep
Analysis of Creep Settlement of Pile Foundations, John R. Booker and Harry G. Poulos, GT1:Jan 76: 1:11826
Creep and Shrinkage in Reactor Containment Shells, Zdenek P. Bazant, Domingo J. Carreira and Adolf Walser, ST10:Oct 75:2117:11632
Creep of Sand-Ice System, Robert G. Rein, Jr., Vidyutkumar V. Hathi and Cedomir M. Sliepcevich, GT2:Feb 75:115:11134
Design for Differential Movement in Brick Walls, Clayford T. Grimm, ST11:Nov 75:2385:11739
Endochronic Theory of Inelasticity and Failure of Concrete, Zdenek P. Bazant and Parameshwara D. Bhat, EM4:Aug 76:701:12360
Explicit Finite-Difference Methods in Geomechanics, Peter Cundall, NMG:June 76:I-132
Finite Element Analysis of Piles in Viscoelastic Soil, John R. Booker and Harry G. Poulos, NMG:June 76:I-425
Load-Induced Strains in Hardened Cement Paste, Leslie J. Parrott and John M. Illston, EM1:Feb 75: 13:11118
Method of Calculating Long-Term Creep Settlements, Harry G. Poulos, Laurence P. de Ambrosis and Edward H. Davis, GT7:July 76:787:12273
Micromechanics Model for Creep of Anisotropic Clay, Zdenek P. Bazant, I. Kutay Ozaydin and Raymond J. Krizek, EM1:Feb 75:57:11138

Creep Recovery
Rock Strain Recovery — Factor in Foundation Design, T. C. Nichols, Jr. and W. Z. Savage, GT76: Aug 76:34

Creep Tests
Micromechanics Model for Creep of Anisotropic Clay, Zdenek P. Bazant, I. Kutay Ozaydin and Raymond J. Krizek, EM1:Feb 75:57:11138

Criteria
Dams in Relation to Balanced Public Safety, Bob Buehler, EFRLD:Sept 75:27
Individual Statement During Summarization Session, Bob Buehler, EFRLD:Sept 75:199

Critical Density
Stratified Flow in Great Salt Lake Culvert, Edward R. Holley and Kidd M. Waddell, HY7:July 76:969: 12250

Critical Depth
Roughness Effects on Rectangular Free Overfall, Nallamuthu Rajaratnam, Durfakula Muralidhar and Spyridon Beltaos, HY5:May 76:599:12152

Critical Path Method
Analysis of Activity Networks under Uncertainty, Alfredo H-S. Ang, Jamal Abdelnour and Amal A. Chaker, EM4:Aug 75:373:11514
Concepts of Project Planning and Control, Boyd C. Paulson, Jr., CO1:Mar 76:67:11984
Developments in CPM, PERT, and Network Analysis, Calin Popescu and John D. Borcherding, CO4:Dec 75:769:11763
Probabilistic Time Scheduling, Keith C. Crandall, CO3:Sept 76:415:12398
VPM Scheduling for High-Rise Buildings, James J. O'Brien, CO4:Dec 75:895:11773

Critical Velocity
Sediment Transport in Smooth Fixed Bed Channels, Pavel Novak and Chandramouli Nalluri, HY9:Sept 75:1139:11556

Crop Production
Agricultural Benefit Assessment from Flood Control, Krishan P. Singh, IR76:July 76:264
Effect of Drainage on the Subsidence of Organic Soil, Ross W. Irwin, IR76:July 76:211
Irrigation Return Flow Water Quality Analysis, Okay Cyril Igwe and T. L. Coulthard, IR76:July 76:519
Irrigation Timetable Combined with Optimal Operating of an Agricultural Production System, Ilan Amir, Y. Friedman, S. Sharon and A. Ben David, IR76:July 76:192
Project Formulation in Today's World — Some Rural Development Dimensions, Graham F. Donaldson, IR76:July 76:700

Cross Sections
Hydraulic Representation of Flow Cross Sections, Sun-Fu Shih and Robert L. Hamrick, TN: IR1:Mar 76:175:11955
Optimal River Cross Sections for Flood Routing, V. Seetharama Rao, Dinshaw N. Contractor and Chinchai Tiyamani, WW76:Aug 76:421
Procedural Errors in Alluvial Channel Measurements, Tariq Masood, Khalid Mahmood and M. M. Siddiqui, WW76:Aug 76:591
Torsional Flutter of Rectangular Prisms, Yasuharu Nakamura and Taketo Mizota, EM2:Apr 75:125: 11226
Use of Depth Profiles for Flow-Model Calibration, Harvey E. Jobson and Thomas N. Keefer, WW76: Aug 76:641

Crude Oil
The Accelerated Deep Water Development System, R. D. Walker and J. J. Zdeb, Preprint No.2677, Apr 76, 30pp.
Geotechnical Aspects of Trans-Alaska Pipeline, Ulrich Luscher, William T. Black and Keshavan Nair, TE4:Nov 75:669:11722
Seismic Response of Pipelines on Friction Supports, James C. Anderson and Anand K. Singh, EM2:Apr 76:275:12043

Culverts
Concrete Pipe Culvert Behavior - Part 2, Raymond Eugene Davis and Alfred E. Bacher, ST3:Mar 74: 615:10408
Concrete Pipe Culvert Behavior—Part 1, Raymond Eugene Davis, Alfred E. Bacher and John C. Obermuller, ST3:Mar 74:599:10404
Highway Fill — A Broad-Crested Weir, Beverly M. Johnson, CE:Oct 76:60
Improved Design of Highway Culvert, Jerome M Normann, CE:Mar 75:70
Iterative Improvement of Finite Element Approximations, Ranbir S. Sandhu, U. Salaam and K. J. Singh, NMG:June 76:I-104
Lower Granite Lock — Prototype Performance, George C. Richardson, WW76:Aug 76:1442
Optimal Design for Highway Drainage Culverts, George K. Young, Jr., Mitchell R. Childrey and Roy E. Trent, HY7:July 74:971:10676
Stratified Flow in Great Salt Lake Culvert, Edward R. Holley and Kidd M. Waddell, HY7:July 76:969: 12250
Synthesis of Finite Element Analysis of Culverts, John F. Abel and James Neil Kay, NMG:June 76: II-873

Curing Agents
Control of Expansive Concretes During Construction, Clyde E. Kesler, CO1:Mar 76:41:11968

Currents
Coastal Engineering—State-of-the-Art Summary, Kiyoshi Horikawa, OE75:June 75:217
Peak Distribution of Random Wave-Current Force, Chi C. Tung, EM5:Oct 74:873:10843
Preoperational and Operational Hydrothermal Field Data Acquisition and Analysis, Mark Markofsky, HY12:Dec 76:1711:12597
Remote Sensing of Turbidity Plumes in Lake Ontario, Edward J. Pluhowski, TE3:Aug 76:475: 12306
Shoaling Rate Prediction Using a Sedimentation Tank, Craig H. Everts, OE75:June 75:294

Simulation of Shoreline and Nearshore Currents, Tamio Sasaki, OE75:June 75:179
Surface Currents in the Arctic and Sub-Arctic Seas as Deduced from Satellite Photographs of Ice Floes, Paul E. La Violette, OE75:June 75:1166
Waves and Wave Forces in the Presence of Currents, Robert A. Dalrymple, OE75:June 75:999

Currents (Water)
Influence of Wave-Current Interactions on Fluid Forces, Chi C. Tung, Preprint No.2706, Apr 76, 12pp.

Curricula
An Integrated Approach to Structural Engineering Education at the Undergraduate Level, Richard N. White, ST76:Aug 76:1001
Present and Future Directions in Design Education, Roger K. Seals and William J. Wilhelm, EI1:Jan 75: 37:11044
A Viewpoint for the Traditional Approach to Structural Engineering Education, Donald R. Sherman, 1976
Why A Co-op Program—A Student's Point of View, Douglas J. Marshall, EI2:Apr 75:243:11264

Curvature
Doubled-Curved Element for Mooney-Rivlin Membranes, John W. Leonard and Vijay K. Verma, EM4:Aug 76:625:12333

Curved Beams
Collapse of Curved Reinforced Concrete Beams, Ian J. Jordaan, Magdi M. A. Khalifa and Arthur E. McMullen, ST11:Nov 74:2255:10951
Curvilinearly Corrugated Plates in Shear, Lung-Hsiang Wu and Charles Libove, ST11:Nov 75:2205: 11714
Diaphragms for Curved Box Beam Bridges, James C. Oleinik and Conrad P. Heins, ST10:Oct 75:2161: 11634
Dynamic Analysis of Curved Box-Girder Bridges, Rahmat Ollah Rabizadeh and Sidney Shore, ST9: Sept 75:1899:11561
End Effects in Long Curved Beam, Bellur S. Ramachandra Rao, S. Gopalacharayulu and N. B. Shukla, EM1:Feb 76:19:11920
Flexural-Torsional Buckling of Curved Members, Porpan Vacharajittiphan and Nicholas S. Trahair, ST6:June 75:1223:11350
Model Studies of Multicell Curved Box-Girder Bridges, Mohammad Aslam and William G. Godden, EM3:June 75:207:11366
Model Study of Horizontally Curved Box Girder, Adel R.M. Fam and Carl J. Turkstra, ST5:May 76: 1097:12151
Skew and Elevated Support Effects on Curved Bridges, Donald W. Funkhouser and Conrad P. Heins, ST7:July 74:1379:10670
Torsion and Flexure of Closed Thin-Walled Beams, Ray N. Nitzsche and Robert E. Miller, TN: EM1: Feb 76:189:11884

Curved Surfaces
Flow and Bed Topography in Curved Open Channels, Hideo Kikkawa, Syunsuke Ikeda and Akira Kitagawa, HY9:Sept 76:1327:12416

Curve Fitting
Stress-Strain Properties of Compacted Clays, David E. Daniel and Roy E. Olson, GT10:Oct 74:1123: 10869

Curves
Design Graphs for Activated Sludge Process, Michael D. Mynhier and C. P.Leslie Grady, Jr., EE5:Oct 75:829:11659
Effects of Meandering in Alluvial Streams, Yasuo Onishi, Subhash C. Jain and John F. Kennedy, HY7:July 76:899:12248
Estimated Indirect Cost of Urban Water Use, Charles H. Lawrance, EE4:Aug 75:517:11482

Curves (Road)
Transition Curves for Speed Changes, Jacob Greenstein, TE4:Nov 76:699:12525

Customer Services
Developing and Maintaining Client Relationship in the Marketing of Engineering Services, Arnold Olitt, CE:June 76:66

Cutoffs
Response of the Mississippi River to the Cutoffs, Brien R. Winkley, WW76:Aug 76:1267
Seepage through Opening in Cutoff Wall Under Weir, Suresh P. Brahma, GT3:Mar 75:329:11204
Study of Artificial Cutoffs on Gravel-Bed Rivers, Dale I. Bray and Andrew J. Cullen, WW76:Aug 76: 1399

Cuts
Stability of Vertical Corner Cut with Concentrated Surcharge Load, Max W. Giger and Raymond J. Krizek, GT1:Jan 76:31:11842

Cutters
Modern Trends in Dredge Design, Thomas M. Turner, DIEE:Jan 76:173

Cyanophyta
Ecology of Blue-Green Algal Viruses, Robert E. Cannon, Miriam S. Shane and Eugene DeMichele, EE6:Dec 74:1205:11012

Cycles
Liquefaction and Cyclic Mobility of Saturated Sands, Gonzalo Castro Salas, GT6:June 75:551:11388
Wet-Wells Volumes for Multipump Systems, Gunther Goldschmidt, IR3:Sept 74:371:10830

Cyclic Loads
Analysis of Offshore Concrete Caisson Dikes under Cyclic Loading, John T. Christian and Jean M.E. Audibert, NMG:June 76:II-979
Analysis of RC Shear Panels under Cyclic Loading, David Darwin and David A. Pecknold, ST2:Feb 76: 355:11896
Aspects of the Analysis of Gravity Offshore Structures, Ian M. Smith, NMG:June 76:II-957
Axial Hysteretic Behavior of Steel Members, Addison B. Higginbotham and Robert D. Hanson, ST7:July 76:1365:12245
Consolidation with Internal Pressure Generation, John T. Christian, TN: GT10:Oct 76:1111:12445
Cyclic Loading Liquefaction of Gravelly Soils, Robert T. Wong, H. Bolton Seed and Clarence K. Chan, GT6:June 75:571:11396
Cyclic Triaxial Strength of Standard Test Sand, Marshall L. Silver, Clarence K. Chan, Richard S. Ladd, Kenneth L. Lee, Drew A. Tiedemann, Frank C. Townsend, Julio E. Valera and James H. Wilson, GT5:May 76:511:12145
Dynamic Shear Moduli for Dry Sands, Mehmet A. Sherif and Isao Ishibashi, GT11:Nov 76:1171:12572
Dynamic Stiffness of Piles, G. W. Blaney, Eduardo Kausel and Jose M. Roesset, NMG:June 76:II-1001
Dynamic Triaxial and Simple Shear Behavior of Sand, Ted K. Park and Marshall L. Silver, GT6: June 75:513:11347
Endochronic Constitutive Law for Liquefaction of Sand, Zdenek P. Bazant and Raymond J. Krizek, EM2:Apr 76:225:12036
Equivalent Uniform Cycle Concept for Soil Dynamics, Mokhtar Annaki and Kenneth L. Lee, Preprint No.2752, Sept 76, 28pp.
Factors Affecting Liquefaction and Cyclic Mobility, Gonzalo Castro Salas and Steve J. Poulos, Preprint No.2752, Sept 76, 34pp.
Fatigue of Periodically Overloaded Stiffener Detail, Ali Abtahi, Pedro Albrecht and George R. Irwin, ST11:Nov 76:2103:12516
Fundamentals of Liquefaction under Cyclic Loading, Geoffrey R. Martin, W. D. Liam Finn and H. Bolton Seed, GT5:May 75:423:11284

Inelastic Cycles of Axially Loaded Steel Members, Lawrence F. Kahn and Robert D. Hanson, ST5: May 76:947:12111
Inelastic Cyclic Response of Split K-Braced Frames, Movses J. Kaldjian, Preprint No.2788, Sept 76, 15pp.
Interface Shear Transfer and Dowel Action in Cracked Reinforced Concrete Subject to Cyclic Shear, Rafael Jimenez, Philip Perdikaris, Peter Gergely and Richard N. White, ST76:Aug 76:457
Liquefaction and Cyclic Mobility of Saturated Sands, Gonzalo Castro Salas, GT6:June 75:551:11388
Liquefaction Potential at Ekotisk Tank in North Sea, Kenneth L. Lee and John A Focht, Jr., GT1:Jan 75:1:11054
Plasticity and Some of Its Corollaries in Soil Mechanics. Collapse and Continuing Deformation Under Load Repetition, Olgierd C. Zienkiewicz, NMG:June 76:III-1275
Pneumatic Sinusoidal Loading System, Clarence K. Chan and John Paul Mulilis, TN: GT3:Mar 76:277: 11953
Saturated Sand and Cyclic Dynamic Tests, Y. Cho, Paul C. Rizzo and Wilfred K. Humphries, Preprint No.2752, Sept 76, 28pp.
Specimen Preparation and Cyclic Stability of Sands, Richard S. Ladd, Preprint No.2752, Sept 76, 28pp.
Testing Procedure Effects on Dynamic Soil Behavior, Marshall L. Silver and Ted K. Park, GT10:Oct 75: 1061:11671
The Threshold of Dilation Under Cyclic Loading, Robert D. Stoll and Lembit Kald, Preprint No.2752, Sept 76, 26pp.

Cyclones

The Darwin Cyclone — Valuable Lesson in Structural Design, George R. Walker, Joseph E. Minor and Richard D. Marshall, CE:Dec 75:82

Cylinders

Base Pressure of Oscillating Circular Cylinders, Peter K. Stansby, EM4:Aug 76:591:12311
Drag and Inertia Coefficients in Oscillatory Flow About Cylinders, C. J. Garrison, Preprint No.2693, Apr 76, 24pp.
Forces due to Nonlinear Waves on Vertical Cylinders, Harihara Raman and Paruchuri Venkatanarasaiah, WW3:Aug 76:301:12326
Forces on Many Cylinders Near a Plane Boundary, Tokuo Yamamoto and John H. Nath, Preprint No.2633, Apr 76, 19pp.
Hydrodynamic Forces and Moments for Oscillating Cylinders, Yong Kwun Chung and Martha I. Coleman, OE75:June 75:899
Hydrodynamic Forces on Multiple Circular Cylinders, Tokuo Yamamoto, HY9:Sept 76:1193: 12395
Interaction of Plane Waves with a Row of Cylinders, Bradford W. Spring and Peter L. Monkmeyer, OE75:June 75:979
Interaction of Water Waves with Cylinder Barrier, Stanislaw R. Massel, WW2:May 76:165:12125
Nonlinear Wave Forces on Halfcylinder and Hemisphere, Subrata K. Chakrabarti and Robert A. Naftzger, WW3:Aug 74:189:10710
Ritz Solutions for Thermoelastic Cylinders, Theodore R. Tauchert, EM5:Oct 76:825:12459
Statistical Properties of Wave Force, Chi C. Tung, EM1:Feb 75:1:11116
Vortex-Excited Oscillations of Elastic Cylinders, Richard A. Skop and Owen M. Griffin, OE75:June 75:535
Wave Forces on Cylinders Near Plane Boundary, Tokuo Yamamoto, John H. Nath and Larry S. Slotta, WW4:Nov 74:345:10944
Wave Forces on Vertical Circular Cylinder, Subrata K. Chakrabarti, Allan L. Wolbert and William A. Tam, WW2:May 76:203:12140

Cylindrical Shells

Buckling of Cylindrical Shells by Wind Pressure, Yung-shih Wang and David P. Billington, EM5:Oct 74:1005:10874
Buckling Stress States of Cylindrical Shells, Ihsan Mungan, ST11:Nov 74:2289:10965
Cantilever Cylindrical Shells Under Assumed Wind Pressures, S. Gopalacharyulu and David J. Johns, EM5:Oct 73:943:10085
Simplified Theory of Thin Cylindrical Shells, Yung-shih Wang, Peter C.Y. Lee and David P. Billington, EM4:Aug 74:719:10720
Stability of Cantilever Shells under Wind Loads, Prabhu S. Kundurpi, Gopalacharyulu Samavedam and David J. Johns, EM5:Oct 75:517:11612

Damage

Economics of Permanent Flood-Plain Evacuation, Nolan L. Johnson, Jr., IR3:Sept 76:273:12378
Engineering Risk Management of Natural and Man-Made Hazards, Larry T. Lee and Jon D. Collins, Preprint No.2757, Sept 76, 30pp.
Historical Review of Earthquakes, Damage, and Building Codes, Glen V. Berg, ST76:Aug 76:387
Loadings and Codes for Typhoon Resistant Design, Hatsuo Ishizaki, ST10:Oct 76:2073:12496
Procedures for Evaluation of Earthquake Risk to Buildings, R. Martin Czarnecki, E. C. Wang and Sigmund A. Freeman, Preprint No.2804, Sept 76, 28pp.
Report on Observations of Attendees at the EF Conference on 'Life Span of Structures', Michael N. Salgo, EI1:Jan 76:47:11870
Risk of Wind Damage to Transmission Line Systems, Alain H. Peyrot and Tarun R. Naik, ST76:Aug 76: 54
Sulfur-Asphalt Mixtures Using Poorly Graded Sands, Don Saylak, Bob M. Gallaway, Jon A. Epps and Haffizudin Ahmid, TE1:Feb 75:97:11106

Dam Construction

Difficult Dam Problems - - Cofferdam Failure, Harry E. Thomas, Eugene J. Miller and John J. Speaker, CE:Aug 75:66
Free-Form Arch Dam Design System, Walter Stensch and G. Gerry, ST4:Apr 75:795:11222
Tehri Rockfill Dam, B. V.K. Lavania, GT9:Sept 75: 963:11587
Today's Northwest Passage, Richard A. Kaden and Roney A. Heinz, CE:June 76:41

Dam Design

Free-Form Arch Dam Design System, Walter Stensch and G. Gerry, ST4:Apr 75:795:11222
Tehri Rockfill Dam, B. V.K. Lavania, GT9:Sept 75: 963:11587

Dam Failure

Alberta's Viewpoint on Risk, John W. Campbell, EFRLD:Sept 75:147
Individual Statement During Summarization Session, Bob Buehler, EFRLD:Sept 75:199
Liability of Consultants in Dam Investigations, Gardner M. Reynolds, EFRLD:Sept 75:157
Liability of the United States Under the Federal Tort Claims Act (28 U.S.C. ¶¶ 1346(b), 2672-80), John R. Little, Jr., EFRLD:Sept 75:121
The National Dam Inspection Program, Charles F. Corns, CE:Apr 75:75
Text of Comments Regarding California's Legal Experience in the Liability of Public Interests, Robert W. James, EFRLD:Sept 75:115
Two Dam Break Routing Models, Thomas N. Keefer and Raul S. McQuivey, WW76:Aug 76:201

Dam Foundations

Foundation Treatment for Little Blue Run Dam, Gerald R. Thiers, Larry W. Lobdell and Bernard M. Mihalcin, GT76:Aug 76:283
Mahoning Dam Foundation Reevaluation, James V. Hamel, Stuart B. Long and Harry F. Ferguson, GT76:Aug 76:217
3-D Finite Element Analysis of a Dam Foundation, Walter Wittke and Stephen Semprich, NMG:June 76:III-1385

Damping
Ambient Response Analysis of Some Tall Structures, George T. Taoka, Michael Hogan, Fazlur R. Khan and Robert H. Scanlan, ST1:Jan 75:49:11051
Aspects of Dynamic Stability of Structures, Horst H.E. Leipholz, EM2:Apr 75:109:11229
Dynamic Relaxation Solution of Seepage Problems, Chandrakant J. Parekh, NMG:June 76:II-1133
Estimating Damping of Real Structures, Jon D. Raggett, ST9:Sept 75:1823:11554
Finite Element Analysis of Doubly Corrugated Shells, Herbert A. Mang, C. V. Girya Vallabhan and Jimmy H. Smith, ST10:Oct 76:2033:12482
Gravity Waves Propagated over Permeable Bottom, Stanislaw R. Massel, WW2:May 76:111:12107
Modal Analysis for Building-Soil Interaction, Jacobo Bielak, EM5:Oct 76:771:12451
Nonlinear Optimum Design of Dynamic Damped Frames, Franklin Y. Cheng and Mark E. Botkin, ST3:Mar 76:609:11993
One-Dimensional Soil Transients by Characteristics, E. Benjamin Wylie and Victor L. Streeter, NMG: June 76:I-151
On Green's Function Techniques for Solutions of Floating Body Problems, Rong-Tai Ho and Ami Harten, OE75:June 75:939
Partial Wave Damping in Pneumatic Breakwaters, Iver Brevik, HY9:Sept 76:1167:12374
Response Analysis of Tall Buildings to Wind Loadings, Rimas Vaicaitis, Masanobu Shinozuka and Masaru Takeno, ST3:Mar 75:585:11194
Structural System Parameter Estimation by Two-Stage Least Squares Method, Will Gersch, George T. Taoka and Robert Liu, EM5:Oct 76:883:12464
Tendon Control in Tall Structures, John Roorda, ST3:Mar 75:505:11168

Dams
The Agency, The Owner, and The Engineer, in Texas, Noble J. Campbell, EFRLD:Sept 75:99
Alberta's Viewpoint on Risk, John W. Campbell, EFRLD:Sept 75:147
Behavior of Compacted Soil in Tension, Abbanki V. Gopala Krishnayya, Zdenek Eisenstein and Norbert R. Morgenstern, GT9:Sept 74:1051:10828
Case History — Problems in Obtaining Repairs to Barber Dam, A. Kenneth Dunn, EFRLD:Sept 75:93
Concrete in Water Resource and Energy Development, Harold G. Arthur, Preprint No.2741, Sept 76, 30pp.
Conference Summary, Joseph J. Ellam, EFRLD:Sept 75:181
Construction of Pueblo Dam, John W. Larson, CO4: Dec 75:883:11769
Corps Guidelines for Dam Safety Inspection Need Revamping, Bob J. Buehler, CE:Jan 75:74
Dam Safety — Texas Style, Joe D. Carter, EFRLD: Sept 75:79
Dams for Others, Neil F. Bogner, EFRLD:Sept 75: 137
Dams in Relation to Balanced Public Safety, Bob Buehler, EFRLD:Sept 75:27
Dimensionless Solution of Dam-Break Flood Waves, John G. Sakkas and Theodor Strelkoff, HY2:Feb 76:171:11910
Discharge Computations at River Control Structures, Dannie L. Collins, HY7:July 76:845:12237
Early Developments in American Concrete, Russell S. Fling, Preprint No.2791, Sept 76, 24pp.
Federal Legislation and Activities for Dam Safety, Homer B. Willis, EFRLD:Sept 75:5
Fibrous Concrete Repair of Cavitation Damage, Ernest K. Schrader and Anthony V. Munch, CO2: June 76:385:12198
Finite Element Analysis of Miyama Rockfill Dam, Tadatsugu Tanaka and Ryoki Nakano, NMG:June 76:II-650
The Hawkins Hydraulic Fill Dam, Kenneth L. Lee and Wolfgang Roth, Preprint No.2662, Apr 76, 20pp.
A History of Bureau of Reclamation Construction-Part I, Harold G. Arthur, CO1:Mar 75:51:11189
Identification and Nature of Dispersive Soils, James L. Sherard, Lorn P. Dunnigan and Rey S. Decker, GT4:Apr 76:287:12052
Individual Statement During Summarization Session, Bob Buehler, EFRLD:Sept 75:199
Inflatable Dam Regulates River Level, Robert A. Gunnerson, CE:Feb 76:83
Judgment in Dam Design, William A. Wahler, EFRLD:Sept 75:167
Landmarks Attest CE Contribution to Progress, CE: Aug 76:76
Liability Considerations in State Dam Permit and Inspection Programs (A Look at Ohio's Program), Roy Winkle, EFRLD:Sept 75:113
Liability of Public and Private Interests on Dams, Joseph A. McQuillan, EFRLD:Sept 75:177
Liability of the United States Under the Federal Tort Claims Act (28 U.S.C. ¶¶ 1346(b), 2672-80), John R. Little, Jr., EFRLD:Sept 75:121
Load Transfer and Hydraulic Fracturing in Zoned Dams, Fred H. Kulhawy and Thomas M. Gurtowski, GT9:Sept 76:963:12400
Meeting the Earthquake Challenge: California's New Laws, Karl V. Steinbrugge and Henry J. Degenkolb, CE:Feb 75:44
The National Dam Inspection Program, Charles F. Corns, CE:Apr 75:75
National Program of Inspection of Dams — Existing Practices and Capabilities, Charles F. Corns, EFRLD:Sept 75:17
National Program of Inspection of Dams — *NATIONAL DAM INVENTORY*, Samuel H. Miles, EFRLD:Sept 75:23
Numerical Solution of Unconfined Seepage Problems, W. D. Liam Finn and Erol Varoglu, NMG:June 76: III-1465
One Owners Dam Safety Program and Its Application Under Government Regulations, Thomas A. Kelly, EFRLD:Sept 75:105
An Outline of the Enforcement of Safety of Dams Statutes in California, Porter A. Towner, EFRLD: Sept 75:87
Predictions of the Hydraulic and Morphological Changes of the "La Grande Riviere" Lower Reach System, Marcel Frenette and Octave Caron, WW76:Aug 76:1229
Pueblo Dam - A Bureau of Reclamation First, Harold G. Arthur, CE:July 75:70
Responsibility and Liability of Public and Private Interests on Dams, Jerry Phelan, EFRLD:Sept 75: 63
Review and Responsibility of State Dam Safety Programs, Bruce A. Tschantz, EFRLD:Sept 75:51
Seismic Response of Reservoir-Dam Systems, E. Benjamin Wylie, HY3:Mar 75:403:11184
Shih-Kang Dam Multi-Purpose Development Project, Walter Chin Mih, WW76:Aug 76:1630
A Stability Study of a Concrete Arch Dam Rock Abutment, Edward C.K. Tom, Nestor T. Mirafuente and Efren Estrella, GT76:Aug 76:264
Survey Program for Civil Works Projects, William A. Angeloni, SU1:Oct 75:121:11662
Tentative Program for the Solution of the Sula Valley Flood Problem, Ricardo Alduvin A., WW76:Aug 76:892
Text of Comments Regarding California's Legal Experience in the Liability of Public Interests, Robert W. James, EFRLD:Sept 75:115
Two Dam Break Routing Models, Thomas N. Keefer and Raul S. McQuivey, WW76:Aug 76:201
Water for the Valley of the Sun, William W. Reedy, Preprint No.2782, Sept 76, 27pp.

Dams (Arch)
Half Century of USBR Arch Dam Construction, James R. Graham, James Legas and Ernest A. Lindholm, CO2:June 75:281:11387
A Stability Study of a Concrete Arch Dam Rock Abutment, Edward C.K. Tom, Nestor T. Mirafuente and Efren Estrella, GT76:Aug 76:264

Dams (Buttress)
Construction of Pueblo Dam, John W. Larson, CO4: Dec 75:883:11769

Dams (Concrete)
Construction of Grand Coulee Third Power Plant, Donald J. Duck, CO4:Dec 75:869:11774
Construction of Pueblo Dam, John W. Larson, CO4: Dec 75:883:11769
Free-Form Arch Dam Design System, Walter Stensch and G. Gerry, ST4:Apr 75:795:11222
Seismic Cracking of Concrete Gravity Dams, Narinder Pal, ST9:Sept 76:1827:12432
A Stability Study of a Concrete Arch Dam Rock Abutment, Edward C.K. Tom, Nestor T. Mirafuente and Efren Estrella, GT76:Aug 76:264
3-D Finite Element Analysis of a Dam Foundation, Walter Wittke and Stephen Semprich, NMG:June 76:III-1385

Dams (Earth)
Analysis of Consolidation in Cores of Earth Dams, Zdenek Eisenstein, Addanki V.G. Krishnayya and Steven T.C. Law, NMG:June 76:II-1089
Behavior of Compacted Soil in Tension, Abbanki V. Gopala Krishnayya, Zdenek Eisenstein and Norbert R. Morgenstern, GT9:Sept 74:1051:10828
Construction of Pueblo Dam, John W. Larson, CO4: Dec 75:883:11769
Dynamic Analysis of the Slide in the Lower San Fernando Dam during the Earthquake of February 9, 1971, H. Bolton Seed, Izzat M. Idriss, Kenneth L. Lee and Faiz I. Makdisi, GT9:Sept 75:889:11541
Fifty-Year Development of Upstream Flood-Control Works Construction, Charlie M. Moore, CO3:Sept 75:477:11543
Identification and Nature of Dispersive Soils, James L. Sherard, Lorn P. Dunnigan and Rey S. Decker, GT4:Apr 76:287:12052
Mica Dam Embankment Stress Analysis, Nigel A. Skermer, GT3:Mar 75:229:11162
Oxygen Depletion and Sulfate Production in Strip Mine Spoil Dams, J. H. Amend, Dinshaw N. Contractor and Chandrakant S. Desai, NMG:June 76:II-1155
Past and Future of Construction Equipment — Part II, Edwin H. Klump, CO4:Dec 75:689:11777
Pinhole Test for Identifying Dispersive Soils, James L. Sherard, Lorn P. Dunnigan, Rey S. Decker and Edgar F. Steele, GT1:Jan 76:69:11846
Pressure Grouting Foundation on Teton Dam, Peter P. Aberle, GT76:Aug 76:245
The Slides in the San Fernando Dams During the Earthquake of February 9, 1971, H. Bolton Seed, Kenneth L. Lee, Izzat M. Idriss and Faiz I. Makdisi, GT7:July 75:651:11449
Some Construction Aspects of Tarbela Dam, Morgan H. Thompson, CO3:Sept 74:247:10799
Static Stresses by Linear and Nonlinear Methods, Kenneth L. Lee and Izzat M. Idriss, GT9:Sept 75: 871:11542
Statistical Quality Control at Kastraki Earth Dam, Panaghiotis C. Kotzias and Aris C. Stamatopoulos, GT9:Sept 75:837:11552

Dams (Embankment)
The Hawkins Hydraulic Fill Dam, Kenneth L. Lee and Wolfgang Roth, Preprint No.2662, Apr 76, 20pp.
Properties of Soil in the San Fernando Hydraulic Fill Dams, Kenneth L. Lee, H. Bolton Seed, Izzat M. Idriss and Faiz I. Makdisi, GT8:Aug 75:801:11527

Dams (Gravity)
Construction of Grand Coulee Third Power Plant, Donald J. Duck, CO4:Dec 75:869:11774
Mahoning Dam Foundation Reevaluation, James V. Hamel, Stuart B. Long and Harry F. Ferguson, GT76:Aug 76:217
Seismic Cracking of Concrete Gravity Dams, Narinder Pal, ST9:Sept 76:1827:12432
A Stability Study of a Concrete Arch Dam Rock Abutment, Edward C.K. Tom, Nestor T. Mirafuente and Efren Estrella, GT76:Aug 76:264

Dams (Movable)
Inflatable Dam Regulates River Level, Robert A. Gunnerson, CE:Feb 76:83

Dams (Rockfill)
Finite Element Analysis of Miyama Rockfill Dam, Tadatsugu Tanaka and Ryoki Nakano, NMG:June 76:II-650
Foundation Treatment for Little Blue Run Dam, Gerald R. Thiers, Larry W. Lobdell and Bernard M. Mihalcin, GT76:Aug 76:283
Generalisation of Sequential Nonlinear Analysis: A Study of Rockfill Dam with Joint Elements, Heramb D. Sharma, Gyan C. Nayak and J. B. Maheshwari, NMG:June 76:II-662
Identification and Nature of Dispersive Soils, James L. Sherard, Lorn P. Dunnigan and Rey S. Decker, GT4:Apr 76:287:12052
In-situ Shear Test for Rock Fills, Surendra P. Jain and Ramesh C. Gupta, GT9:Sept 74:1031:10823
Pinhole Test for Identifying Dispersive Soils, James L. Sherard, Lorn P. Dunnigan, Rey S. Decker and Edgar F. Steele, GT1:Jan 76:69:11846
Some Construction Aspects of Tarbela Dam, Morgan H. Thompson, CO3:Sept 74:247:10799
Tehri Rockfill Dam, B. V.K. Lavania, GT9:Sept 75: 963:11587
Wave Motion in Rockfill, Mohamed Sameh Nasser and John A. McCorquodale, WW2:May 75:145: 11286

Dam Stability
Mahoning Dam Foundation Reevaluation, James V. Hamel, Stuart B. Long and Harry F. Ferguson, GT76:Aug 76:217
The National Dam Inspection Program, Charles F. Corns, CE:Apr 75:75
Opening Remarks, Joseph J. Ellam, EFRLD:Sept 75: 1

Daniel W. Mead Prize
1976 Daniel W. Mead Prize for Associate Members Presented to Glenn R. Koepp, CE:Oct 76:104

Daniel W. Mead Prize For Students
1976 Daniel W. Mead Prize for Students Presented to James P. Kiser, CE:Oct 76:105

Darcys Law
Transformation of Moody Diagram, Krishna C. Asthana, HY6:June 74:797:10624

Dashpots
Energy Absorbing Boundary for Anisotropic Material, Somasundaram Valliappan, Weeks White and Ian K. Lee, NMG:June 76:II-1013

Data Acquisition
Data Acquisition Methods for Coastal Currents, Paul G. Teleki, F. R. Musialowski and D. A. Prins, OE75:June 75:1190
Research Activity and Needs in Engineering Surveying, Gunther Greulich, SU1:Oct 75:65:11610

Data Processing
Construction Information Systems in Romania, Daniel W. Halpin and Nicolai Tutos, CO2:June 76: 335:12176
Environmental Data Management, George K. Young and G. F. Tierney, WR2:Nov 76:255:12559

Data Reduction
Data Reduction Methods for Hydrologic Analysis, Keith L. Lewinger, Daniel P. Loucks and Edward A. McBean, HY1:Jan 75:17:11053

Data Systems
Augmentation of 1968-1972 Winter Storms in New Mexico, Conrad G. Keyes, Jr., HY12:Dec 76:1725: 12616
Comprehensive Water Quality Management Planning, Kenneth A. Bartal and Leonardo V. Gutierrez, Jr., HY4:Apr 75:371:11263
Data Reduction Methods for Hydrologic Analysis, Keith L. Lewinger, Daniel P. Loucks and Edward A. McBean, HY1:Jan 75:17:11053
FILES: Automated Engineering Data Management System, Leonard A. Lopez, ST4:Apr 75:661:11241

Land-Based Modeling System for Water Quality Management Studies, Walter M. Grayman, Richard M. Males, William E. Gates and A. W. Hadder, HY5:May 75:567:11327
Metrication—SI in America, Cornelius Wandmacher, EI1:Jan 75:25:11073
Planning and Control of Combined Sewerage Systems, William R. Giessner, Robert T. Cockburn, Frank H. Moss, Jr. and Mark E. Noonan, EE4:Aug 74:1013:10744
Processing Variable Forms for Travel Estimation, Jason C. Yu and Robert J. Popper, TE1:Feb 76:91:11938
Research Needs Relative to Environmental Data, Byron H. Willis, HY11:Nov 75:1423:11700
Systems Analysis and Solid Waste Planning, Robert M. Clark and James I. Gillean, EE1:Feb 74:7:10316

Decentralization
Water Supply Economics, Robert M. Clark, UP1:Aug 76:213:12357

Dechlorination
Sewage Chlorination Versus Toxicity -- A Dilemma?, Harvey F. Collins and David G. Deaner, EE6:Dec 73:761:10190

Deciduous Trees
Micro-Climate Control of Deciduous Fruit Production with Overhead Sprinklers, Richard E. Griffin, IR76:July 76:278

Decision Making
Analysis of Urban Transportation Criteria, Thabet Zakaria, TE3:Aug 75:521:11496
Citizens Groups and Public Participation: Problems and Observations, Jonathan N. Brownell, EFEEC: Aug 75:388
Decisions About Wastewater Technology, 1800-1932, Joel A. Tarr and Francis Clay McMichael, Preprint No.2792, Sept 76, 30pp.
Dynamic Programming Model for Wastewater Plant Investment, John M. Armstrong, EE5:Oct 76:985:12466
Economics and Water Resources Planning in America: 1776-1976, L. Douglas James and Jerry R. Rogers, Preprint No.2754, Sept 76, 30pp.
Environmental Decision-Making and Facilities Siting, Michael S. Baram, EI2:Apr 76:211:12080
Formal Representation of Design Requirements, Steven J. Fenves, ST76:Aug 76:739
Information Models in Building Design Process, Alan D. Russell, EI2:Apr 75:133:11217
Multiobjective Planning: Concepts and Methods, A. Bruce Bishop, Mac McKee, T. Ward Morgan and Rangesan Narayanan, WR2:Nov 76:239:12563
Multiobjective Planning: New Directions and Methodology, A. Bruce Bishop, Mac McKee, T. Ward Morgan and Rangesan Narayanan, Preprint No.2715, Apr 76, 26pp.
Operations Models for Central Valley Project, Leonard Becker, William W-G. Yeh, Dan M. Fults and Donald Sparks, WR1:Apr 76:101:12062
Policy-Making and Acceptable Earthquake Risk, Robert A. Olson, EFRLD:Sept 75:141
Systems Aspects of Water Resources Planning in America: 1776 to 1976, Stephen J. Burges, Preprint No.2754, Sept 76, 34pp.
Two Centuries of Water Planning: A Review of the Development of Methodology, Ray K. Linsley, Preprint No.2754, Sept 76, 10pp.

Decision Theory
ACI Building Code in Decision Logic Table Format, Jimmy L. Noland and Chuan C. Feng, ST4:Apr 75:677:11220
Bayesian Approach to Tile Drain Design, Andre Musy and Lucien Duckstein, IR3:Sept 76:317:12390
Models for Evaluation of Hazardous Wastes, Albert J. Klee, EE1:Feb 76:111:11940
Multiple Criteria Theory and Airport Site Evaluation, John J. Jarvis, V. Ed Unger, Charles C. Schimpeler and Joseph C. Corradino, UP1:Aug 76:187:12353
On Bidding—A Dynamic Model with One Competitor, Fletcher H. Griffis, Preprint No.2709, Apr 76, 28pp.
Use of Decision Theory in Reservoir Operation, Samuel O. Russell, HY6:June 74:809:10586

Decomposition
Multilevel Approach to Optimum Structural Design, Uri Kirsch, ST4:Apr 75:955:11259

Deep Percolation
Water Movement in Soil from Trickle Source, Ahmed Y. Hachum, Jose F. Alfaro and Lyman S. Willardson, IR2:June 76:179:12204

Deep Water
Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, Preprint No.2702, Apr 76, 30pp.
Deepsea Drilling Workshop, Jared L. Black and Joel M. Goodman, OE75:June 75:846
Design of Piles for Deep Water Offshore Structures, P. George and Ian M. Smith, NMG:June 76:I-419
Ocean Engineering in the Design of Sea Islands, Michael J. McCarthy, Edward J. Schmeltz and Joseph Bonasia, OE75:June 75:762
Pressure Field at Deep Depth due to Surface Motion, J. D. Lin and Edward Y.T. Kuo, OE75:June 75:1276

Deep Wells
Management of Waste Fluids in Salaquifers, Raphael G. Kazmann, Oscar K. Kimbler and Walter R. Whitehead, IR4:Dec 74:413:10991
Underground Liquid Waste Disposal, Don L. Warner, Chmn., HY3:Mar 75:421:11191

Definitions
Productivity in Engineering Design, Kenneth F. Reinschmidt, PROD:Aug 76:21

Deflection
Approximate Analysis of Multistory Multibay Frames, Paul C.K. Chan, Arthur C. Heidebrecht and Wai K. Tso, ST5:May 75:1021:11302
Beam Deflections by Numerical Integration, Stephen J. Speicher, CE:Dec 75:67
Cumulative Deflection and Pavement Performance, William H. Highter and Milton E. Harr, TE3:Aug 75:537:11507
Deflection and Ponding of Steel Joists, R. Richard Avent, ST7:July 76:1399:12241
Design Concepts for Structural Steel Dolphins, Casimir J. Kray, ST76:Aug 76:661
Design for Differential Movement in Brick Walls, Clayford T. Grimm, ST11:Nov 75:2385:11739
Design of Building Floor Systems Subjected to Steady-State Dynamic Loads, Donald W. Vannoy, Furman W. Barton and Conrad P. Heins, ST76:Aug 76:720
FE Analyses of Rafts on Viscoelastic Foundations, Yang H. Huang, NMG:June 76:I-463
Finite Deflection of Tapered Cantilevers, Gangan Prathap and Tirupathi Kumara Varadan, TN: EM3: June 76:549:12168
Guidance for Load Tests of Buildings, Neal FitzSimons and Anatole Longinow, ST7:July 75:1367:11431
Illustrations of Reliability-Based Design, Mayasandra K. Ravindra, Niels C. Lind and Wilfred W.C. Siu, ST9:Sept 74:1789:10779
Improved Two-Dimensional Finite Element, Robert D. Cook, ST9:Sept 74:1851:10808
Incremental Finite Element Matrices, Sundaramoorthy Rajasekaran and David W. Murray, ST12:Dec 73:2423:10226
Multistory Frame Design Using Story Stiffness Concept, Francois Cheong Siat Moy, ST6:June 76:1197:12221
Numerical Analysis of Rigid Pavement Resting over Hookean Subgrade Continuum, Madan G. Arora and Sudarshan K. Khanna, NMG:June 76:I-511

Response of Flexible Pavements to Multiple Loads, Yu Tang Chou, Ronald L. Hutchinson and Harry H. Ulery, Jr., TE2:May 75:247:11307
Significance of Variably Confined Triaxial Testing, John J. Allen and Marshall R. Thompson, TE4:Nov 74:827:10911
Simplified Analysis of Framed-Tube Structures, Alexander Couil and Bishwanath Bose, ST11:Nov 75:2223:11696
Single Element Panel for Flat Plate Structures, Sid French, Algis P. Kabaila and Victor A. Pulmano, ST9:Sept 75:1801:11553

Deflectors
Cavitation Control by Aeration of High-Velocity Jets, Glenn L. Beichley and Danny L. King, HY7:July 75:829:11462

Deformation
Analysis of Buried Pipe Under Embankment, Shamsher Prakash, Gyan C. Nayak and R. Gupta, NMG:June 76:II-886
Anisotropy and Stress Reorientation in Clay Under Load, Hideki Ohta and C. Peter Wroth, NMG:June 76:I-319
Axisymmetrical Deformation of Bimodulus Orthotropic Circular Cylindrical Shell, Norio Kamiya, EM1:Feb 76:89:11916
Calculations to Test a Pack Ice Model, Max D. Coon, Roger Colony, Robert S. Pritchard and D. A. Rothrock, NMG:June 76:II-1210
A Case History of Expansive Claystone Damage, Richard L. Meehan, Michael T. Dukes and Patrick O. Shires, GT9:Sept 75:933:11590
A Constitutive Equation for Normally Consolidated Clays, Toshihisa Adachi, NMG:June 76:I-282
Deformation of Deep Excavations, Dieter Stroh and Herbert Breth, NMG:June 76:II-686
Design for Differential Movement in Brick Walls, Clayford T. Grimm, ST11:Nov 75:2385:11739
A Difference Scheme for the AIDJEX Sea Ice Model, Robert S. Pritchard and Roger Colony, NMG:June 76:II-1194
Differential Settlement of Buildings, Rebecca Grant, John T. Christian and Erik H. Vanmarcke, GT9: Sept 74:973:10802
Elasto-Plastic Finite Element Analyses of Sand Deformations, Yoshio Ozawa and James M. Duncan, NMG:June 76:I-243
FE Analysis of Soil Movements Below a Test Embankment, Toru Shibata, Masanari Tominaga and Hajime Matsuoka, NMG:June 76:II-599
Field Problems of Latticed Structures, Lev Zetlin, Joseph F. Thelen and Daniel A. Cuoco, ST11:Nov 75:2241:11711
Finite Element Analyses of Arch Abutments, E. D'Appolonia, Donald E. Shaw, Jacques Richard and Daniel A. Raynaud, GT76:Aug 76:55
Finite Element Analysis of Large Deformation in Slopes, Nimitchai Snitbhan and Wai F. Chen, NMG:June 76:II-744
Free Vibration Analysis Using Substructuring, Gordon H. Holze and Arthur P. Boresi, ST12:Dec 75:2627:11788
Full-Depth Asphalt Airfield Pavements, Matthew W. Witczak and James F. Shook, TE2:May 75:297: 11331
Generalisation of Sequential Nonlinear Analysis: A Study of Rockfill Dam with Joint Elements, Heramb D. Sharma, Gyan C. Nayak and J. B. Maheshwari, NMG:June 76:II-662
Guidance for Load Tests of Buildings, Neal FitzSimons and Anatole Longinow, ST7:July 75: 1367:11431
Incremental Finite Element Matrices, Sundaramoorthy Rajasekaran and David W. Murray, ST12:Dec 73:2423:10226
In Situ Measurement of Initial Stress and Deformation Characteristics, C. Peter Wroth, GT75:June 75:II-181
Irregular Supports and Skew Diaphragms of Box Girders, Vladimir Kristek, ST5:May 74:917:10541
Mathematical Model to Simulate Channel Deformation, Purshottam Dass and Daryl B. Simons, WW76:Aug 76:1
Nonlinear Analyses in Soil and Solid Mechanics, Hugh L. Davidson and Wai F. Chen, NMG:June 76:I-205
Plasticity and Some of Its Corollaries in Soil Mechanics. Collapse and Continuing Deformation Under Load Repetition, Olgierd C. Zienkiewicz, NMG:June 76:III-1275
Polymer-Impregnated Concrete: Laboratory Studies, Einar Dahl-Jorgensen, Wai F. Chen, John A. Manson, Yu-Nan Liu and John W. Vanderhoff, TE1:Feb 75:29:11101
Predicting Deformation in the Fort Union Formation, Van A. Silver, Samuel P. Clemence and Richard W. Stephenson, GT76:Aug 76:13
Pressuremeter and Laboratory Test Correlations for Clays, Robert G. Lukas and Bruno LeClerc de Bussy, GT9:Sept 76:945:12410
Response of Footings on Micaceous, Cohesionless Soils, Jean M.E. Audibert, Nabil F. Ismael and G. Wayne Clough, NMG:June 76:I-567
Rock Strain Recovery — Factor in Foundation Design, T. C. Nichols, Jr. and W. Z. Savage, GT76: Aug 76:34
Shear Behavior of Steel Frame Joints, Helmut Krawinkler, Vitelmo V. Bertero and Egor P. Popov, ST11:Nov 75:2317:11717
Stochastic Analysis of Floor Loads, Ross B. Corotis and Viresh A. Doshi, ST76:Aug 76:72
Study of Deformation Characteristics and Analyses of Jointed Rock Masses, Ryuichi Iida, Koji Hojo and Kozo Saito, NMG:June 76:I-232
Tests and Analysis of Beam-to-Column Web Connections, Wai F. Chen and Glenn P. Rentschler, ST76:Aug 76:957
Tests of Welded Steel Beam-to-Column Moment Connections, John Parfitt, Jr. and Wai F. Chen, ST1:Jan 76:189:11854
Three-Dimensional Analysis of Vertical Pile Groups, Prasanta K. Banerjee and Richard M. Driscoll, NMG:June 76:I-438
Ultimate Torque of Reinforced Concrete Beams, David J. Victor, Narayanan Lakshmanan and Narayanan Rajagopalan, ST7:July 76:1337:12249
Viscoplastic Constitutive Matrix Corresponding to the Hyperbolic Sine Creep Law, Guenter W. Borm, NMG:June 76:I-357

Deformation Modulus
Foundation of the Sirikit Powerhouse, James D. Gill and Leib Wolofsky, GT76:Aug 76:82
Stress-Path Dependent Deformation Moduli of Clay, Yudhbir and A. Varadarajan, GT3:Mar 75:315: 11198

Degradation
Study of Artificial Cutoffs on Gravel-Bed Rivers, Dale I. Bray and Andrew J. Cullen, WW76:Aug 76: 1399

Degradation (Stream)
Tests of Scour Protection for Bridge Piers, Chesley J. Posey, HY12:Dec 74:1773:11017

Degrees of Freedom
Distribution of Subgrade Reaction Using Substructuring Finite Element Methods, Satyananda Chakrabarti, Nishikant R. Vaidya and Donald E. Shaw, NMG:June 76:I-551
Solutions of Impact Problems for Structural Dynamic Analyses, Robert J. McCaffery, STN75:Dec 75:II-47

Deicing
Salt Storage and Runoff in Urban Watershed, Richard H. Hawkins, EE4:Aug 76:737:12292

Delaware
Discs Reduce Manhole Infiltration, Warren S. O'Sullivan, CE:Aug 75:77

Delay Time
"Construction Delay: Responsibility, Risks, and Litigation," by James J. O'Brien (Book Review), Skip O. Warren, CE:Dec 76:30
Learning and Experience Curves, Marvin Gates and Amerigo Scarpa, CO1:Mar 72:79:8778
Staging of Improvements to Air Transport Terminals, Angus J. McKenzie, Jack W.E. Huggett and Kenneth W. Ogden, TE4:Nov 74:855:10920

Deltas
Computer Modeling of Erodible Flood Channels and Deltas, Howard H. Chang and Joseph C. Hill, HY10:Oct 76:1461:12485
Significance of Water Quality to Water Resources, Vernon E. Valantine, Preprint No.2673, Apr 76, 13pp.

Demand
Predicting Demand for Engineered Facilities, James P. Romualdi, EI3:July 75:365:11426
Use of Decision Theory in Reservoir Operation, Samuel O. Russell, HY6:June 74:809:10586

Demand Responsive Transportation Sys
An Algorithm for Route Deviation Service, Stanley T.L. Lung and Wilfred W. Recker, TE1:Feb 76:161:11931
Processing Variable Forms for Travel Estimation, Jason C. Yu and Robert J. Popper, TE1:Feb 76:91:11938

Demolition
Helicopter-Erected Tower Crane Demolishes Buildings, Charles R. Schrader, CE:May 75:60

Denitrification
Fate of Nitrogen in Sewage Effluent Applied to Soil, J. Clarence Lance, IR3:Sept 75:131:11570
Optimization of Denitrification Process, Richard P. Michael and William J. Jewell, EE4:Aug 75:643:11532

Densification
Future Advances in Soil Placement and Improvement, J. Richard Bell, Preprint No.2775, Sept 76, 19pp.
Underwater Placement of Sand Fill at Port of Portland Terminal #6, Loren R. Anderson and John Ramage, Preprint No.2718, Apr 76, 20pp.

Density
Hydraulics of Surface Buoyant Jet, Frank Engelund, HY9:Sept 76:1315:12409
Numerical Computation of Well-Mixed Estuarine Flows, John P. Grubert, HY7:July 76:955:12255
Salinity Induced Horizontal Estuarine Circulation, Brady A. Elliott and Robert O. Reid, WW4:Nov 76:425:12550
Swelling Rock: A Review, Ernest N. Lindner, GT76: Aug 76:141

Density Currents
Stratified Flow in Great Salt Lake Culvert, Edward R. Holley and Kidd M. Waddell, HY7:July 76:969:12250

Density Functions
Method for Random Vibration of Hysteretic Systems, Yi-Kwei Wen, EM2:Apr 76:249:12073

Density Stratification
Selective Withdrawal Criteria of Stratified Fluids, Timothy W. Kao, HY6:June 76:717:12188

Deoxygenation
Oxygen Depletion Model for Cayuga Lake, J. Denis Newbold and James A. Liggett, EE1:Feb 74:41:10346

Deployment
Analysis of Cable Dynamics—State-of-the-Art Summary, John H. Nath, OE75:June 75:623
Anchor-Last Deployment Simulation by Lumped Masses, Robert W. Thresher and John H. Nath, WW4:Nov 75:419:11709
Development of Analysis Techniques for Deployment, Robert W. Thresher, OE75:June 75:593

Deposition
Channel Entrance Response to Jetty Construction, J. M. Kieslich and Curtis Mason, OE75:June 75:689
Experience with the Offset Surfaces Breakwater, E. Douglas Sethness, Jr., Walter L. Moore and James E. Dailey, OE75:June 75:677

Deposits
Effects of Deposit Resuspension on Settling Basin, Takeichiro Takamatsu, Masaaki Naito, Sadataka Shiba and Yasuyo Ueda, EE4:Aug 74:883:10705

Depth
Effects of Deposit Resuspension on Settling Basin, Takeichiro Takamatsu, Masaaki Naito, Sadataka Shiba and Yasuyo Ueda, EE4:Aug 74:883:10705
Use of Depth Profiles for Flow-Model Calibration, Harvey E. Jobson and Thomas N. Keefer, WW76: Aug 76:641

Desalting
Dense Effluent Dispersion in a Stream, Henry Crew and Robert O. Reid, EM1:Feb 76:77:11915

Desiccation
Experimental Work for Active Clays in Mississippi, T. C. Paul Teng and M. Barrett Clisby, TE1:Feb 75:77:11105
The Hawkins Hydraulic Fill Dam, Kenneth L. Lee and Wolfgang Roth, Preprint No.2662, Apr 76, 20pp.

Design
Analysis and Management of Water Distribution Systems, Hubert Demard, Bernard Bobee and Jean-Pierre Vilieneuve, UP2:Nov 75:167:11679
Art in Engineering - The Need for a New Criticism, David P. Billington, PP4:Oct 73:499:10102
Bicycle Facility Design Considerations: A Summary, John E. Baerwald, BP75:Dec 75:259
"Construction and Design of Cable-Stayed Bridges," by Walter Podolny, Jr. and John B. Scalzi (Book Review), Charles Seim, CE:Oct 76:34
Design and Operation Model of Activated Sludge, Joseph H. Sherrard and Alonzo W. Lawrence, EE6: Dec 73:773:10220
Design Criteria for H-Columns under Biaxial Loading, Negussie Tebedge and Wai F. Chen, ST3: Mar 74:579:10400
Design of Reinforced Concrete Spandrel Beams, Thomas T.C. Hsu and Kenneth T. Burton, ST1:Jan 74:209:10277
Design Optimization for Biological Filter Models, Harold B. Gotaas and William S. Galler, EE6:Dec 73:831:10191
Fifty-Year Development of Upstream Flood-Control Works Construction, Charlie M. Moore, CO3:Sept 75:477:11543
Full-Depth Asphalt Airfield Pavements, Matthew W. Witczak and James F. Shook, TE2:May 75:297:11331
Half Century of USBR Arch Dam Construction, James R. Graham, James Legas and Ernest A. Lindholm, CO2:June 75:281:11387
Integrated Study of Reinforced Earth—II: Behavior and Design, Chih-Kang Shen, Karl M. Romstad and Leonard R. Herrmann, GT6:June 76:577:12210
Judgment in Dam Design, William A. Wahler, EFRLD:Sept 75:167
Least Cost Design of Branched Pipe Network System, Arun K. Deb, EE4:Aug 74:821:10711
Present and Future Directions in Design Education, Roger K. Seals and William J. Wilhelm, EI1:Jan 75: 37:11044
Pueblo Dam - A Bureau of Reclamation First, Harold G. Arthur, CE:July 75:70

Punching Shear Strength of Restrained Slabs, Brian E. Hewitt and Barrington deV. Batchelor, ST9:Sept 75:1837:11548
Seismic Design Spectra for Nuclear Power Plants, Nathan M. Newmark, John A. Blume and Kanwar K. Kapur, PO2:Nov 73:287:10142
Settlement of Building on Pile Foundation in Sand, Robert M. Koerner and Antal Partos, GT3:Mar 74: 265:10405
Shear Behavior of Steel Frame Joints, Helmut Krawinkler, Vitelmo V. Bertero and Egor P. Popov, ST11:Nov 75:2317:11717
Steel Box-Girder Bridges—Ultimate Strength Considerations, Charles G. Culver, Chmn., ST12: Dec 74:2433:11014
Thinking Aesthetically is a Part of Structural Engineering, Frederick M. Law, ST76:Aug 76:1
Unique Team Effort on Washington Subway Project, Delon Hampton and David Novick, EI1:Jan 76: 129:11872
Wave Forces on Cylinders Near Plane Boundary, Tokuo Yamamoto, John H. Nath and Larry S. Slotta, WW4:Nov 74:345:10944
"Wind Resistant Design Concepts for Residences," by Delhart B. Ward (Book Review), Herbert S. Saffir, CE:June 76:38

Design Criteria
Formal Representation of Design Requirements, Steven J. Fenves, ST76:Aug 76:739
Hydraulic Design of Vertical Stilling Wells, Philip H. Burgi, HY7:July 75:801:11451
Planning Criteria for Bikeways, Vincent R. Desimone, TE3:Aug 73:609:9928
Stilling Basin Design for Low Froude Number, Nani G. Bhowmik, HY7:July 75:901:11448

Design Earthquake
Design Spectra for Nuclear Power Plants, Ricardo A. Guzman and Paul C. Jennings, PO2:Nov 76:165: 12521

Design Practices
Developing Region in Self-Aerated Flows, Robert J. Keller, K. K. Lai and Ian R. Wood, HY4:Apr 74: 553:10501
Productivity as Influenced by Design Management Processes, Winfield O. Salter, PROD:Aug 76:1
Productivity in Engineering Design, Kenneth F. Reinschmidt, PROD:Aug 76:21

Destructive Distillation
Pyrolysis as Means of Sewages Sludge Disposal, Nancy E. Folks, R. Addis Lockwood, Bert A. Eichenberger, Frank R. Bowerman and Kenneth Y. Chen, EE4:Aug 75:607:11518

Detention Reservoirs
Hydrologic Impact of Planned Unit Developments, Richard H. McCuen and Harry W. Piper, UP1:May 75:93:11329
Sediment Control during Highway Construction in Central Pennsylvania, Lloyd A. Reed, IR76:July 76: 497
Three Towns: Three Different Solutions to Stormwater Control, Charles F. Hemming, CE:Sept 76:65
Yeast Plant Wastewater Treatment, Yeun C. Wu and Chiao F. Kao, EE5:Oct 76:969:12468

Deterioration
Durability of Concrete Construction—50 Years of Progress, Bryant Mather, CO1:Mar 75:5:11165
Durability of Concrete in Seawater, Povindar K. Mehta and Harvey H. Haynes, ST8:Aug 75:1679: 11516
Landmark Erie Canal Structure Rehabilitated, Lawrence H. Lehman, Bertram Shapiro and Robert J. Trapani, CE:Oct 76:62
Reliability Theory of Deteriorating Structures, Hiroyuki Kameda and Takeshi Koike, ST1:Jan 75: 295:11079

Developing Countries
Federal Manpower in Water Resource Engineering, Edward R. Lewandowski, WR2:Nov 76:185:12533
Leadership Constraint in Project Preparation, Phillip Z. Kirpich, EI4:Oct 76:417:12503
Water Supplies for Low-Income Communities in Developing Countries, Richard G. Feachem, EE5: Oct 75:687:11608

Development
The Engineering Computer Revolution—Over or Just Beginning, David E. Wojick, EI3:July 76:351:12276

Dewaterers
New Gravity/Pressure Unit Cuts Sludge Dewatering Costs, Eugene E. Dallaire, CE:Jan 76:69

Dewatering
Dewatering Chemical-Primary Sludges, David Di Gregorio and Gerald L. Shell, EE5:Oct 76:1087: 12474
Dewatering Rock for Construction, George F. Sowers, GT76:Aug 76:200
Difficult Dam Problems - - Cofferdam Failure, Harry E. Thomas, Eugene J. Miller and John J. Speaker, CE:Aug 75:66
Meeting the Challenge of Constructing a Reservoir Bypass Pipeline, Duane D. Buchholz and Roger T. Menlove, Preprint No.2644, Apr 76, 19pp.
Optimal Pumping for Aquifer Dewatering, Eduardo Aguado, Irwin Remson, Mary F. Pikul and Will A. Thomas, HY7:July 74:869:10639
Transport Phenomena Applied to Sludge Dewatering, Peter Kos and Donald Dean Adrian, EE6:Dec 75: 947:11781

Diaphragms (Mechanics)
Bibliography on Wood and Plywood Diaphragms, J. M. Carney, ST11:Nov 75:2423:11737
Buckling Formulas for Corrugated Metal Shear Diaphragms, John T. Easley, ST7:July 75:1403: 11429
Calculation of Steel Diaphragm Behavior, J. Michael Davies, ST7:July 76:1411:12254
Design of Diaphragm-Braced I-Beams, David A. Nethercot and Nicholas S. Trahair, ST10:Oct 75: 2045:11615
Design of I-Shaped Columns with Diaphragm Bracing, Samuel J. Errera and Tamirisa V.S.R. Apparao, ST9:Sept 76:1685:12397
Diaphragms for Curved Box Beam Bridges, James C. Oleinik and Conrad P. Heins, ST10:Oct 75:2161: 11634

Dielectric Properties
Plastic Tower Solves Radar Interference, Paul A. Gossen and Richard L. Tomasetti, CE:Dec 76:46
Relationship of Soil Moisture to the Dielectric Property, Ernest T. Selig and Sundru Mansukhani, GT8:Aug 75:755:11517

Differential Equations
Review of Selected Topics in Finite Element Analysis, Robert D. Cook, ST76:Aug 76:535

Differential Pressure
Consolidation Settlement of a Layered Subsurface, Surendra K. Saxena and Chandrakant S. Desai, NMG:June 76:III-1419

Differential Settlement
Differential Settlement of Buildings, Rebecca Grant, John T. Christian and Erik H. Vanmarcke, GT9: Sept 74:973:10802
Some Geotechnical Aspects of Marginal Wharf Design, William Enkeboll and Vernon A. Smoots, Preprint No.2699, Apr 76, 24pp.

Diffraction
Finite Element Analysis of Wave Diffraction by a Crack, Zdenek P. Bazant, John L. Glazik, Jr. and Jan D. Achenbach, EM3:June 76:479:12220

Forces due to Nonlinear Waves on Vertical Cylinders, Harihara Raman and Paruchuri Venkatanarasaiah, WW3:Aug 76:301:12326
Interaction of Water Waves with Cylinder Barrier, Stanislaw R. Massel, WW2:May 76:165:12125

Diffusers
Design of Alternating Diffuser Pipes, Aleksandar Nospal and Jean-Claude Tatinclaux, TN: HY4:Apr 76:553:12018
Determination of Length and Direction of Ocean Outfall Diffuser at Wantagh Sewage Treatment Plant, Nassau County, New York, Wen H. Huang, OE75:June 75:1294
Mean Energy in Gradually Diverging Flow, Alan F. Babb and Jaime Amorocho, HY5:May 76:581: 12097
Statistical Design Basis for Submerged Diffuser, Thomas E. Pease and Michael J. Skelly, PO1:July 75:11:11408

Diffusion
Analytical Solution for 3-D Diffusion Model, Edward Y.T. Kuo, EE4:Aug 76:805:12315
Buoyant Forced-Plumes in Cross Flow, Vincent H. Chu and Michael B. Goldberg, HY9:Sept 74:1203: 10805
Coastal Dispersion of Pollutants, Ryszard B. Zeidler, WW2:May 76:235:12121
Design of Alternating Diffuser Pipes, Aleksandar Nospal and Jean-Claude Tatinclaux, TN: HY4:Apr 76:553:12018
Diffusion and Mixing Processes of an Ocean (Abstract), Abhimanyu Swain, Harold D. Palmer and Kent T.S. Tzou, OE75:June 75:1436
Diffusion of Water under Subfreezing Temperature, Jai P. Gupta and Stuart W. Churchill, TN: GT2: Feb 76:185:11885
Role of Eddy Diffusivity in Thermocline Formation, Brian Henderson-Sellers, EE3:June 76:517:12174
Transverse Dispersion in Oscillatory Channel Flow, Peter R.B. Ward, HY6:June 74:755:10589
Waste Heat Discharges from Offshore Power Plants, E. Eric Adams, Charles W. Almquist, Diane V. Ingraham and Keith D. Stolzenbach, OE75:June 75: 41

Digital Computers
Computerized Inventory of Traffic Signs, Tapan K. Datta and David M. Litvin, TE4:Nov 75:707:11708

Digital Techniques
Experience with Computer-Aided Drafting System, Geoffrey M.J. Williams, ST4:Apr 75:649:11224

Dikes
Analysis of Offshore Concrete Caisson Dikes under Cyclic Loading, John T. Christian and Jean M.E. Audibert, NMG:June 76:II-979
Channelization of River Bhargavi, India, Bishnu P. Das, WW76:Aug 76:1700
Construction of the 40-Foot Channel in Columbia River, Robert O. Dodge, WW76:Aug 76:259
Dredged Material Confinement Facilities as Solid-Liquid Separation Systems, Raymond J. Krizek, Joseph A. FitzPatrick and Dimitrios K. Atmatzidis, DIEE:Jan 76:609
Engineering Challenges of Dredged Material Disposal, Robert M. Meccia, William C. Allanach and Fletcher H. Griffis, WW1:Feb 75:1:11096
Hawaii's Offshore Runway, Wayne L. Rickerd, Preprint No.2696, Apr 76, 19pp.
Lake Erie Airport Study — A Status Report, Herbert R. Crawford, Preprint No.2635, Apr 76, 27pp.
Man-Induced Changes of Middle Mississippi River, Michael A. Stevens, Daryl B. Simons and Stanley A. Schumm, WW2:May 75:119:11281
Mississippi River Dikes and Stage-Discharge Relations, Jerome A. Westphal, Paul R. Munger and Clifford D. Muir, WW76:Aug 76:1383
The Port of Philadelphia — Past and Present, Clarence F. Wicker, Preprint No.2774, Sept 76, 20pp.
Quarantine Island Disposal Plan, George Marsch, DIEE:Jan 76:579
Some Geotechnical Aspects of Marginal Wharf Design, William Enkeboll and Vernon A. Smoots, Preprint No.2699, Apr 76, 24pp.
Transient Drainage Flow Analysis for a Coastal Site, Yung-chi Chang and Yun-jui Tsai, OE75:June 75: 1046

Dilatancy
Finite Element Analysis of Stresses and Movements in Excavations, Hiromitsu Izumi, Katsumi Kamemura and Seiichi Sato, NMG:June 76:II-701
Generalized Cap Model for Geological Materials, Ivan S. Sandler, Frank L. DiMaggio and George Y. Baladi, GT7:July 76:683:12243
Pore Pressures Near Moving Underwater Slope, Karel L. Meijer and Adriaan G. van Os, GT4:Apr 76:361:12021

Dilatation
The Threshold of Dilation Under Cyclic Loading, Robert D. Stoll and Lembit Kald, Preprint No.2752, Sept 76, 26pp.

Dilation
Evaluation of Three Stress-Strain Models for Soils, Jean-Marie J. Vagneron, Poul V. Lade and Kenneth L. Lee, NMG:June 76:III-1329
Interpretation of Torsion Shear Tests on Sand, Poul V. Lade, NMG:June 76:I-381

Dilution
Cooled Seawater Discharge in Harbor Environment, Yuan Jen and Richard B. Dornhelm, OE75:June 75:1362

Dimensional Analysis
Centrifugal Modelling of Riverbank Failure, Sam Frydman and D. Huw Beasley, GT5:May 76:395: 12099
Gross Parameter Solutions of Jets and Plumes, Klas Cederwall, HY5:May 75:489:11285
Method for Delineating Districts of Varying Shape, Geoffrey N. Berlin, TE4:Nov 76:805:12537

Direct Shear
Mahoning Dam Foundation Reevaluation, James V. Hamel, Stuart B. Long and Harry F. Ferguson, GT76:Aug 76:217

Disability Evaluation
Designing for the Disadvantaged: Optimum Design Considers All Users, John J. Fruin, CE:Mar 75:65

Disasters
Disaster-Caused Increases in Construction Costs, Thomas N. Yancey, Jr., James L. Douglas and D. Earl Jones, Jr., CE:Sept 76:94
Disaster Caused Increases in Unit Repair Cost, Thomas N. Yancey, Jr., L. Douglas James, D. Earl Jones, Jr. and Jeanne Goedert, WR2:Nov 76:265: 12564
Liability of Consultants in Dam Investigations, Gardner M. Reynolds, EFRLD:Sept 75:157

Discharge
Missouri River Stage-Discharge Shift, A. D. Berryman, Howard E. Christian and Everett V. Richardson, WW76:Aug 76:1350

Discharge (Water)
Analysis and Interpretation of a Heated Jet, H. H. Carter, Donald W. Pritchard and S. R. Rives, OE75:June 75:1420
Channelization of River Bhargavi, India, Bishnu P. Das, WW76:Aug 76:1700
Determining Optimal Well Discharge, Otto J. Helweg, IR3:Sept 75:201:11566
Diversion Tunnel Capacity Without Backwater in Diverted Flow, Georgije Hajdin and Cedo Maksimovic, WW76:Aug 76:993
Exit of Ground Waters on Drainage Boundaries, Boris S. Browzin, GT2:Feb 76:159:11909

Experimental Investigation of Flow Over Side Weirs, Ahmed El-Khashab and Kenneth V.H. Smith, HY9: Sept 76:1255:12402
Explicit Equations for Pipe-Flow Problems, Prabhata K. Swamee and Akalank K. Jain, HY5:May 76:657: 12146
Field Research in Large Sand Bed Channels, Khalid Mahmood and Riaz Nazir Tarar, WW76:Aug 76: 1318
Float Calibration in Intergrated-Float Techniques, Peter H. John, F. Allan Johnson and Peter Sutcliffe, HY8:Aug 76:1071:12308
Friction Effects on Spatially Varied Open Channel Flows with Increasing Discharge, J. D. Lin, Victor E. Scottron and Hsiang Kuei Soong, WW76:Aug 76:1517
The Guyon Model and the Experimental Subsurface Drainage Behaviour, Robert Lagace and Gilbert Sylvestre, IR76:July 76:229
Impact of Energy Complexes on Freshwater Environments, Loren D. Jensen, EFEEC:Aug 75: 235
Mississippi River Regime Analysis, Wallace H. Walters, Jr., WW76:Aug 76:730
Procedural Errors in Alluvial Channel Measurements, Tariq Masood, Khalid Mahmood and M. M. Siddiqui, WW76:Aug 76:591
Rapid Temperature Reduction of Thermal Discharge, Ronald D. Townsend and David L. Egar, HY5:May 75:529:11312
Roughness Characteristics of the Lower Mississippi, Lamont G. Robbins, WW76:Aug 76:1209
Sediment Discharge by Glacier-Fed Rivers in Alaska, Craig H. Everts, WW76:Aug 76:907
Spillway Modification to Reduce Gas Supersaturation, Peter M. Smith, WW76:Aug 76: 667
Two Dam Break Routing Models, Thomas N. Keefer and Raul S. McQuivey, WW76:Aug 76:201
Wastewater Reuse Aspects of Energy Complexes, Stanley J. Dea, EFEEC:Aug 75:171
Wastewater Storage-Simulation of Instream Effects, John S. Tapp, EE6:Dec 76:1151:12601

Discharge Coefficients

Characteristics of Proportional Weirs, D. Chandrasekaran and Nagar S. Lakshmana Rao, HY11:Nov 76:1677:12560
Discharge over Polygonal Weirs, Horst Indlekofer and Gerhard Rouve, HY3:Mar 75:385:11178

Discharge Measurement

Measuring Water Velocity by Ultrasonic Flowmeter, Jack C. Schuster, HY12:Dec 75:1503:11806
Meter for Sewer Flow Measurement, Harry G. Wenzel, Jr., HY1:Jan 75:115:11070
Resistance to Flows in Alluvial Channels, ChiEmeka G. Ilo, HY6:June 75:665:11352

Discontinuities

Analysis of Shear-Induced Anisotropy in Leda Clay, K. T. Law and Kwan Y. Lo, NMG:June 76:I-329
Cone Penetration of Granular and Cohesive Soils, Raymond N. Yong and Choong-Kong Chen, EM2: Apr 76:345:12081
Mechanics of the Frank Slide, John Krahn and Norbert R. Morgenstern, GT76:Aug 76:309
Models of Geological Materials in Ground Shock, Ivan S. Sandler and Melvin L. Baron, NMG:June 76:I-219

Discounted Cash Flow

Discounted Cash Flow Analysis to Select Equipment, Richard Briller, EE3:June 76:595:12190

Discrete Distribution Functions

Discrete Field Stability Analysis of Ribbed Plates, R. Richard Avent and Dieter Bounin, ST9:Sept 76: 1917:12413

Discrete Model

Discrete Model of Beams on Elastic Foundation, Gregory Szuladzinski, EM6:Dec 75:839:11814

Diseases

Disease Risks of Occupational Exposure to Sewage, C. Scott Clark, Edward J. Cleary, Gilbert M. Schiff, Clavin C. Linneman, Jr., John P. Phair and Terrence M. Briggs, EE2:Apr 76:375:12038
Impact of Water Resources on Vector-Borne Diseases, Richard O. Hayes, WR2:Nov 76:177: 12526
Persistence of Virus on Sewage-Irrigated Vegetables, Edward P. Larkin, John T. Tierney and Robert Sullivan, EE1:Feb 76:29:11935

Disks (Shapes)

Hydraulic Performance of Tilting-Disk Check Valves, Ronald S. Kane and Soung M. Cho, HY1:Jan 76: 57:11873

Dispersion

Analytical Solution for 3-D Diffusion Model, Edward Y.T. Kuo, EE4:Aug 76:805:12315
Coastal Dispersion of Pollutants, Ryszard B. Zeidler, WW2:May 76:235:12121
Comparison of Numerical Schemes, John C. Bruch, Jr. and Roland W. Lewis, NMG:June 76:I-115
Convective Model of Longitudinal Dispersion, Raul S. McQuivey and Thomas N. Keefer, HY10:Oct 76:1409:12478
Dense Effluent Dispersion in a Stream, Henry Crew and Robert O. Reid, EM1:Feb 76:77:11915
Diffusion and Mixing Processes of an Ocean (Abstract), Abhimanyu Swain, Harold D. Palmer and Kent T.S. Tzou, OE75:June 75:1436
Dispersion—Mississippi River Below Baton Rouge, La., Raul S. McQuivey and Thomas N. Keefer, HY10:Oct 76:1425:12490
Effects of Deposit Resuspension on Settling Basin, Takeichiro Takamatsu, Masaaki Naito, Sadataka Shiba and Yasuyo Ueda, EE4:Aug 74:883:10705
Hydraulics of Surface Buoyant Jet, Frank Engelund, HY9:Sept 76:1315:12409
Influence of Equivalent Sand Roughness on the Dispersion Coefficient in Laboratory and Natural Streams, Ho-Shong Hou and Bent A. Christensen, WW76:Aug 76:1179
Influence of Tidal Inlets on Salinity in Estuaries, N. Jothi Shankar, WW4:Nov 75:369:11692
Longitudinal Dispersion Coefficients for Streams, Subhash C. Jain, EE2:Apr 76:465:12037
Longitudinal Dispersion for Flow over Rough Beds, Nabil D.Abd El-Hadi and Kersi S. Davar, HY4:Apr 76:483:12049
Measurements of Estuary Dispersion Coefficients, Peter R.B. Ward, TN: EE4:Aug 76:855:12285
One-Dimensional Temperature Predictions in Unsteady Flows, Dominque N. Brocard and Donald R.F. Harleman, HY3:Mar 76:227:11982
Oxygen Depletion and Sulfate Production in Strip Mine Spoil Dams, J. H. Amend, Dinshaw N. Contractor and Chandrakant S. Desai, NMG:June 76:II-1155
Pollution Prediction Model of Long Island Sound, Malcolm J. Bowman, OE75:June 75:1084
Prediction of Mixing Lengths for River Flow Gaging, Peter R.B. Ward, HY7:July 73:1069:9856
Radial Dispersion in Ground-Water Flow, Bruce W. Hunt, EM6:Dec 74:1117:10998
Radial Dispersion Through Adsorbing Media, Anand Prakash, HY3:Mar 76:379:11995
Simple Method for Predicting Dispersion in Streams, Raul S. McQuivey and Thomas N. Keefer, EE4: Aug 74:997:10708
Solution for Radial-Flow with Nonlinear Adsorption, Surendra P. Gupta and Robert A. Greenkorn, EE1: Feb 76:87:11901
Some Remarks on Computer Modeling of Coastal Flows, Hugo B. Fischer, WW4:Nov 76:395:12520
Stochastic Characteristics of Sediment Motions, Hin Fatt Cheong and Hsieh W. Shen, HY7:July 76: 1035:12269
Transient Dispersion in Uniform Media Flow, Hung Tao Shen, HY6:June 76:707:12202
Transverse Dispersion in Oscillatory Channel Flow, Peter R.B. Ward, HY6:June 74:755:10589

Vertical Temperature Profiles in Open-Channel Flow, Eric J. Schiller and William W. Sayre, HY6:June 75:749:11389

Dispersion Relations
Point Source Dispersion in Turbulent Open Channels, Kemal M. Atesmen, HY7:July 75:789: 11413

Dispersions
Point Source Dispersion in Turbulent Open Channels, Kemal M. Atesmen, HY7:July 75:789: 11413
Simulation of Hydraulic Processes in Open Channels, Chao-Lin Chiu, Hsin-Chi Lin and Kazumasa Mizumura, HY2:Feb 76:185:11905

Displacement
Calculation of Raft Foundations on Clayey Silts, Quirin Laumans and Hermann Schad, NMG:June 76:1-475
Comparison of Boundary Integral Equation and FE Methods, Shien T. Wang and George E. Blandford, TN: ST9:Sept 76:1941:12370
Earthquake Response of Offshore Structures, Owen M. Kirkley and Joseph P. Murtha, OE75:June 75: 865
Soil-Structure Interaction of Concrete Pipe Systems, Raymond J. Krizek, Ross B. Corotis and Thomas H. Wenzel, ST76:Aug 76:607
Static and Dynamic Flexibility Matrix for a Semi-Infinite Solid, Tarun R. Naik and Chu-Kia Wang, ST76:Aug 76:644

Displacements
Cracking Analysis of Reinforced Concrete Plates, Maharaj K Wanchoo and Gerald W. May, ST1:Jan 75:201:11059

Disposal
Management of Waste Fluids in Salaquifers, Raphael G. Kazmann, Oscar K. Kimbler and Walter R. Whitehead, IR4:Dec 74:413:10991

Dissemination (Information)
Current and Proposed Construction Research Studies, John D. Borcherding and Brennon P. Hatley, CO3: Sept 76:547:12423

Dissolved Oxygen
Distributions of BOD and DO in Rivers and Lakes, Robert B. Banks, EE2:Apr 76:265:12028
DO-Sag in Oscillating Flow, Wen-Hsiung Li and Michael Edwin Kozlowski, EE4:Aug 74:837:10713
Effects of Destratification on Depth Distribution of Fish, Glen E. Gebhart and Robert C. Summerfelt, EE6:Dec 76:1215:12608
Impact of Dredging on Water Quality in Grays Harbor, Washington, John M. Smith, James B. Phipps, Eugene B. Schermer and Don F. Samuelson, DIEE:Jan 76:512
Reaeration and Velocity Prediction for Small Streams, Edward G. Foree, EE5:Oct 76:937:12448
Steady-State Water Quality Modeling in Streams, Robert Willis, Donald R. Anderson and John A. Dracup, EE2:Apr 75:245:11246
Systematic Identification of DO-BOD Model Structure, Bruce Beck and Peter Young, EE5:Oct 76:909:12461
Two-Dimensional Mathematical Water Quality Model, Brian J. Williams and Jon B. Hinwood, EE1:Feb 76:149:11947
Wastewater Storage-Simulation of Instream Effects, John S. Tapp, EE6:Dec 76:1151:12601

Dissolved Solids
Evaluation Strategies of Metal Pollution in Oceans, Kenneth Y. Chen and R. Addis Lockwood, EE2: Apr 76:347:12023

Distance Measuring Equipment
Simultaneous Geodimeter and Tellurometer Distances, Wolfgang M. Gopfert, SU1:Oct 75:89: 11623

Distance Perception
Simultaneous Geodimeter and Tellurometer Distances, Wolfgang M. Gopfert, SU1:Oct 75:89: 11623

Distortion
Warping and Distortion at I-Section Joints, Porpan Vacharajittiphan and Nicholas S. Trahair, ST3:Mar 74:547:10390

Distribution
Distributing Public Housing Resources, Bruce Yandle and George Biediger, UP2:Nov 75:147:11689
Extreme Wave Height Distributions Over Oceans, Herbert C.S. Thom, WW3:Aug 73:355:9939
A Standard for Computer Program Distribution, John T. Christian, Chmn., GT10:Oct 76:1049:12472

Distribution Patterns
Effects of Destratification on Depth Distribution of Fish, Glen E. Gebhart and Robert C. Summerfelt, EE6:Dec 76:1215:12608

Distribution Theory
Ultimate Live Load Distribution Factor for Bridges, Conrad P. Heins and John T.C. Kuo, ST7:July 75: 1481:11443

Ditches
Three Towns: Three Different Solutions to Stormwater Control, Charles F. Hemming, CE:Sept 76:65

Diversion
Low Flow Criteria for Diversions and Impoundments, Sie Ling Chiang and Fred W. Johnson, WR2:Nov 76:227:12553

Diversion Structures
Diversion Tunnel Capacity Without Backwater in Diverted Flow, Georgije Hajdin and Cedo Maksimovic, WW76:Aug 76:993
Shin-Shen Canal Diversion Structure — Taipei, Taiwan, Richard R. Deussen, WW76:Aug 76:1459
Utilization and Control of Rivers in the Southwest, George A. Whetstone, WW76:Aug 76:1149

Diversion Tunnels
Diversion Tunnel Capacity Without Backwater in Diverted Flow, Georgije Hajdin and Cedo Maksimovic, WW76:Aug 76:993
Flood Routing in the System of Free Surface Tunnels, Cedo Maksimovic and Miodrag Radojkovic, WW76:Aug 76:190

Diversion Works
Recent Techniques in Water Diversion, Fuat Senturk, WW76:Aug 76:1476

Diving
Recent Developments in Underwater Construction, Philip K. Rockwell, Preprint No.2669, Apr 76, 28pp.

Docks
Underwater Placement of Sand Fill at Port of Portland Terminal #6, Loren R. Anderson and John Ramage, Preprint No.2718, Apr 76, 20pp.
180-Ft. x 1000-Ft. Shipbuilding Dock for National Steel and Shipbuilding Company, Ronald A. Dahlin, Preprint No.2671, Apr 76, 15pp.

Documentation
Software: Internal Maintenance Documentation, David M. Jubenville, Elizabeth Heinze and Robert L. Schiffman, ST76:Aug 76:903
User Documentation for Engineering Software, James P. Cassidy, Norman R. Greve and Douglas F. Burnside, ST76:Aug 76:884

Documents
Specifications—Design Professionals' Forgotten Challenge, Edward R. Fisk, CO2:June 76:303:12171

Dolphins (Structures)
Design Concepts for Structural Steel Dolphins, Casimir J. Kray, ST76:Aug 76:661

Domes (Structural)
Latticed Structures: State-of-the-Art Report, Donald R. Sherman, Chmn., ST11:Nov 76:2197:12581

Domes (Structural Forms)
Brick Masonry Shells, Clayford T. Grimm, ST1:Jan 75:79:11050
Largest and Lightest Fabric Roof to Date, David H. Geiger, CE:Nov 75:82

Dowels
Interface Shear Transfer and Dowel Action in Cracked Reinforced Concrete Subject to Cyclic Shear, Rafael Jimenez, Philip Perdikaris, Peter Gergely and Richard N. White, ST76:Aug 76:457

Drafting
Experience with Computer-Aided Drafting System, Geoffrey M.J. Williams, ST4:Apr 75:649:11224

Drag
Drag and Inertia Coefficients in Oscillatory Flow About Cylinders, C. J. Garrison, Preprint No.2693, Apr 76, 24pp.
Drag Forces on Tornado Borne Missiles, James F. Costello and Willy Z. Sadeh, STN75:Dec 75:II-21
Earthquake Response of Offshore Structures, Owen M. Kirkley and Joseph P. Murtha, OE75:June 75:865
Hydrodynamic Forces on Cables Subject to Frequency Varied Motion, Robert W. Haas and Richard F. Dominguez, Preprint No.2728, Apr 76, 26pp.
Parallel Flow Between Corrugated Plates, Chang-Yi Wang, TN: EM6:Dec 76:1088:12591
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, Preprint No.2687, Apr 76, 28pp.
Resonance Phenomena Due to Turbulent Boundary Layer Excitation of Elastic Surfaces, Robert L. Ash and R. Balasubramanian, Preprint No.2726, Apr 76, 28pp.
Shallow Laminar Flows over Rough Granular Surfaces, Harry O. Phelps, HY3:Mar 75:367:11166
Waves and Wave Forces in the Presence of Currents, Robert A. Dalrymple, OE75:June 75:999

Drainage
Analysis of Flow through Vegetation, Sylvester Petryk, HY7:July 75:871:11457
Approximate Solution for Unconfined Seepage, Chandrakant S. Desai, IR1:Mar 73:71:9607
Automatic Control of Large-Scale Combined Sewer Systems, John W. Labadie, Neil S. Grigg and Bruce M. Bradford, EE1:Feb 75:27:11115
Concrete Pipe Culvert Behavior - Part 2, Raymond Eugene Davis and Alfred E. Bacher, ST3:Mar 74:615:10408
Concrete Pipe Culvert Behavior—Part 1, Raymond Eugene Davis, Alfred E. Bacher and John C. Obermuller, ST3:Mar 74:599:10404
Design of Storm Sewer Networks, Ben Chie Yen and Ahmet Suha Sevuk, EE4:Aug 75:535:11503
Deterioration of Concrete Ditch Liners in Saline-Alkali Soil, Luther B. Grass and Paul Koluvek, IR4:Dec 74:477:10997
Determining Streamflows from Geomorphic Parameters, John F. Orsborn, IR4:Dec 74:455:10986
Development of Storm Drainage Cost Functions, Neil S. Grigg and John P. O'Hearn, HY4:Apr 76:515:12069
Drawdown Solutions for Simultaneous Drainage and ET, R. Wayne Skaggs, IR4:Dec 75:279:11804
Economics and Financial Aspects of Canadian Irrigation and Drainage Projects, Harry B. Rosenberg, IR76:July 76:640
Effect of Drainage on the Subsidence of Organic Soil, Ross W. Irwin, IR76:July 76:211
Effect of Drains on Pressures Below Structures, Amrik S. Chawla, GT1:Jan 76:15:11827
Effect of Snow Cover on Upward Movement of Soil Moisture, Eugene L. Peck, IR4:Dec 74:405:10989
Estimation of Rainfall Erosion Index, John K.H. Ateshian, IR3:Sept 74:293:10817
Estimation of Washload Produced on Certain Small Watersheds, Oswald Rendon-Herrero, HY7:July 74:835:10638
Evaluation and Implementation of Urban Drainage Projects, Neil S. Grigg, UP1:May 75:61:11324
Generalized Nomographic Solution of Hooghoudt Equations, John G. Sakkas, IR1:Mar 75:21:11182
Highlights of San Diego Convention, CE:June 76:67
Impact of Urban Utility Corridors on Agricultural Drainage, G. V. Eades, A. M. Shady and Robert S. Broughton, IR76:July 76:155
Improved Design of Highway Culvert, Jerome M Normann, CE:Mar 75:70
Infiltration Into Increasingly Permeable Soils, Herman Bouwer, IR1:Mar 76:127:11959
International Aspects of Irrigation and Drainage in the Yuma Area, Wesley E. Steiner, Jr., IR76:July 76:558
Irrigation Return Flow Modeling for the Souris Loop, Richard W. Ribbens and Marvin J. Shaffer, IR76:July 76:545
Maintenance Management Aids, Eugene L. Marvin, Preprint No.2637, Apr 76, 25pp.
Management of Waste Fluids in Salaquifers, Raphael G. Kazmann, Oscar K. Kimbler and Walter R. Whitehead, IR4:Dec 74:413:10991
Operation and Maintenance of Irrigation and Drainage Systems: Section IV — Maintenance, Richard A. Smith, Chmn., IR1:Mar 76:1:11963
Optimal Design for Highway Drainage Culverts, George K. Young, Jr., Mitchell R. Childrey and Roy E. Trent, HY7:July 74:971:10676
Optimal Pumping for Aquifer Dewatering, Eduardo Aguado, Irwin Remson, Mary F. Pikul and Will A. Thomas, HY7:July 74:869:10639
Outlet Drainage — An Assessment of Environmental Effects, J. C. Day, R. F. Brady and M. J. Staite, IR76:July 76:445
An Overview of Environmental Effects of Agricultural Drainage in Canada, Frank R. Hore and Robert S. Broughton, IR76:July 76:138
Performance of Pennsylvania Highway Drainage Inlets, Arthur W. Brune, Walter H. Graf, Erik Appel and Peter P. Yee, HY12:Dec 75:1519:11801
Planning and Control of Combined Sewerage Systems, William R. Giessner, Robert T. Cockburn, Frank H. Moss, Jr. and Mark E. Noonan, EE4:Aug 74:1013:10744
Protection and Enhancement of Fisheries and Wildlife Resources, F. Eugene Hester, IR76:July 76:690
Quantitative Assessment of Changes in Urban Runoff, Irina Cech and Karen Assaf, IR1:Mar 76:119:11957
Saturated and Unsaturated Flow to Parallel Drains, R. Wayne Skaggs and Yau-K. Tang, IR2:June 76:221:12199
Selection of Models for Urban Drainage Problems: Technical Aspects and Non-Technical Constraints, Paul E. Wisner, Adel F. Ashmalla and Patrick A. Ahern, IR76:July 76:246
Simulation of Quality of Urban Drainage Effluents, Jiri Marsalek, IR76:July 76:564
Soil-Moisture-Temperature for Alaskan Lowland, Gary L. Guymon, IR3:Sept 75:187:11562
Solutions for Unconfined Non-Darcy Seepage, Raymond E. Volker, IR1:Mar 75:53:11203
Stability Analysis of Cut Slopes at Auburn Dam, J. Lawrence Von Thun, GT76:Aug 76:349
Steady Non-Darcian Seepage Through Embankments, P. Basak, IR4:Dec 76:435:12623
Storm Water Management for the Merivale Industrial Area — Township of Nepean, J. C. Anderson, IR76:July 76:593
A Subsurface Drainage Cost and Hydrologic Model, Ashim K. Bhattacharya, Nader Foroud, Sie-tan Chieng and Robert S. Broughton, Preprint No.2773, Sept 76, 18pp.

Subsurface Drainage Solutions by Galerkin's Method, Purushottam Dass and Hubert J. Morel-Seytoux, IR1:Mar 74:1:10397
Subsurface Versus Surface Drainage Water Quality and Environmental Impacts, E. Penkava, IR76:July 76:97
Summer Moisture-Temperature for Arctic Tundra, Gary L. Guymon, IR4:Dec 76:403:12613
Transient Drainage with Nonlinearity and Capillarity, David B. McWhorter and Harold R. Duke, IR2: June 76:193:12185
Water Management Through Irrigation and Drainage: Progress, Problems, and Opportunities, Jan van Schilfgaarde, Chmn., IR2:June 74:153:10619
Water Quality and Aquitard Permeability, James H. Hardcastle and James K. Mitchell, IR2:June 76: 205:12203
Water Quality Aspects of Agricultural and Urban Drainage, Philip B. Bedient and William G. Characklis, IR76:July 76:374

Drainage Basins
Correlation Analysis of Hydrometeorological Data, Ashok N. Shahane, Daniel Thomas and Paul Bock, HY10:Oct 76:1561:12484

Drainage Programs
Sewering the City of New York, Martin Lang, Charles Samowitz, Mohan Jethwani and Frederick Novotny, CE:Jan 76:54

Drainage Systems
Filter Fabrics: Growing Use in Road and Highway Construction, Eugene E. Dallaire, CE:May 76:61
The Guyon Model and the Experimental Subsurface Drainage Behaviour, Robert Lagace and Gilbert Sylvestre, IR76:July 76:229
Operation and Maintenance of Irrigation and Drainage Systems: Section IV — Maintenance, Richard A. Smith, Chmn., IR1:Mar 76:1:11963
QUURM — Implications for the Design of Urban Drainage Systems, W. Edgar Watt, Kenneth C. Wilson and Joan E. Eaton, IR76:July 76:580
Selection of Models for Urban Drainage Problems: Technical Aspects and Non-Technical Constraints, Paul E. Wisner, Adel F. Ashmalla and Patrick A. Ahern, IR76:July 76:246
Transient Drainage Flow Analysis for a Coastal Site, Yung-chi Chang and Yun-jui Tsai, OE75:June 75: 1046

Drained Shear Tests
Anisotropy in Heavily Overconsolidated Kaolin, Srinath F. Amerasinghe and Richard H.G. Parry, GT12:Dec 75:1277:11808
Fundamentals of Liquefaction under Cyclic Loading, Geoffrey R. Martin, W. D. Liam Finn and H. Bolton Seed, GT5:May 75:423:11284
Strain Rate Behavior of Compacted Silt, Nikhilesh Roy and Parth Sarathi, GT4:Apr 76:347:12024
Stress-Path Dependent Deformation Moduli of Clay, Yudhbir and A. Varadarajan, GT3:Mar 75:315: 11198

Drains
Dewatering Rock for Construction, George F. Sowers, GT76:Aug 76:200
Generalized Nomographic Solution of Hooghoudt Equations, John G. Sakkas, IR1:Mar 75:21:11182
Irrigation Return Flow Modeling for the Souris Loop, Richard W. Ribbens and Marvin J. Shaffer, IR76: July 76:545
Saturated and Unsaturated Flow to Parallel Drains, R. Wayne Skaggs and Yau-K. Tang, IR2:June 76: 221:12199
Subsurface Versus Surface Drainage Water Quality and Environmental Impacts, E. Penkava, IR76:July 76:97
Tackling Major Highway Landslides in the Tennessee Mountains, David L. Royster, CE:Sept 75:85
Transient Drainage with Nonlinearity and Capillarity, David B. McWhorter and Harold R. Duke, IR2: June 76:193:12185

Drawbridges
Fifty-Year History of Movable Bridge Construction - Part I, Egbert R. Hardesty, Henry W. Fischer and Richard W. Christie, CO3:Sept 75:511:11565
Fifty-Year History of Movable Bridge Construction- Part II, Egbert R. Hardesty, Henry W. Fischer and Richard W. Christie, CO3:Sept 75:529:11594

Drawdown
Drawdown Solutions for Simultaneous Drainage and ET, R. Wayne Skaggs, IR4:Dec 75:279:11804
The Guyon Model and the Experimental Subsurface Drainage Behaviour, Robert Lagace and Gilbert Sylvestre, IR76:July 76:229

Drawings
The State-of-the-Art of Computer Graphics Applications in Structural Engineering, Robert D. Logcher, Chmn., ST3:Mar 75:459:11158

Dredges
Analysis of Dredging Projects, William B. Pearce, DIEE:Jan 76:139
Analytical Model of Hydraulic Pipeline Dredge, David R. Basco, WW1:Feb 75:33:11097
Challenges in Disposal of Dredged Material, B. C. Godwin, Preprint No.2648, Apr 76, 13pp.
Development and Future of Dredging, Adolph W. Mohr, WW2:May 74:69:10513
Dredged Material: Natural Resource or National Nuisance, Jaap de Nekker and Kees d'Angremond, DIEE:Jan 76:866
Dredging and the Environmental Policy Act of 1969, James H. Bradley, DIEE:Jan 76:39
Economic Value of Dredged Material, Wyndham J. Roberts, DIEE:Jan 76:919
Energy and Pollution Concerns in Dredging, Adolph W. Mohr, WW4:Nov 75:405:11733
Experience in Using Dredge Material for Construction Purposes, Joseph H. Lamar and James E. Laier, DIEE:Jan 76:882
Feedback from Field Studies of Hydraulic Dredges, David R. Basco, WW3:Aug 75:277:11526
Habitat Development on Dredged Material, Hanley K. Smith, DIEE:Jan 76:856
Hydraulic Dredges, Including Boosters, Gail G. Gren, DIEE:Jan 76:115
Mechanical Dredges, Adolph W. Mohr, DIEE:Jan 76:125
Modern Trends in Dredge Design, Thomas M. Turner, DIEE:Jan 76:173
New Method Dewaters Dredged Material, Cuts Lagooning Space, CE:Apr 75:90
Physicochemical Properties of Dredge Spoil, Alena Mudroch and Ales J. Zeman, WW2:May 75:201: 11317
The Port of Philadelphia — Past and Present, Clarence F. Wicker, Preprint No.2774, Sept 76, 20pp.
Predicting and Controlling Turbidity Around Dredging and Disposal Operations, William D. Barnard, DIEE:Jan 76:930
Water Quality Effects of a Dredging Disposal Area, Raymond J. Krizek, Brian J. Gallagher and Gabor M. Karadi, EE2:Apr 76:389:12040

Dredging
Analysis of Oxygen Demand of Sediments, J. Clement Burdick, III, DIEE:Jan 76:319
Analytical Model of Hydraulic Pipeline Dredge, David R. Basco, WW1:Feb 75:33:11097
Bioassessment of the Standard Elutriate Test, Peter J. Shuba, Joe H. Carroll and Henry E. Tatem, DIEE: Jan 76:645
Challenges in Disposal of Dredged Material, B. C. Godwin, Preprint No.2648, Apr 76, 13pp.
Channel Entrance Response to Jetty Construction, J. M. Kieslich and Curtis Mason, OE75:June 75:689
Chemical Reactions During Disposal Operations, Thomas H. Wakeman and Calvin C. Fong, Preprint No.2712, Apr 76, 18pp.
Deposition and Erosion in the Dredge Spoil and Other New York Bight Dumping Areas, George L. Freeland and George F. Merrill, DIEE:Jan 76:936

Development and Future of Dredging, Adolph W. Mohr, WW2:May 74:69:10513
Dredged Material as a Natural Resource, Michael R. Walsh, Preprint No.2714, Apr 76, 19pp.
Dredged Material Confinement Facilities as Solid-Liquid Separation Systems, Raymond J. Krizek, Joseph A. FitzPatrick and Dimitrios K. Atmatzidis, DIEE:Jan 76:609
Dredged Material Disposal: Social Costs and Other Externalities, R. M. Pope, DIEE:Jan 76:398
Dredged Material: Natural Resource or National Nuisance, Jaap de Nekker and Kees d'Angremond, DIEE:Jan 76:866
Dredge-Fill in the Coral Reef Tract of the Northern Florida Keys, George M. Griffin, DIEE:Jan 76:768
Dredging and the Environmental Policy Act of 1969, James H. Bradley, DIEE:Jan 76:39
Dredging and the National Environmental Policy Act of1969, James H. Bradley, Preprint No.2734, Apr 76, 16pp.
Economic Impact of Dredging Regulations, Frank C. Boerger and Michael H. Cheney, DIEE:Jan 76:408
Economic Value of Dredged Material, Wyndham J. Roberts, DIEE:Jan 76:919
Effects of Suspended Dredged Material on the Commercial Crab, *Cancer Magister*, Richard Peddicord and Victor McFarland, DIEE:Jan 76:633
Elutriation of Dredge Material in New Orleans Harbor, Charles Grimwood and Terence J. McGhee, WW76:Aug 76:476
Embankment Loading of Hydraulic Fill, Timothy K. Dahlstrand, Preprint No.2649, Apr 76, 14pp.
Energy and Pollution Concerns in Dredging, Adolph W. Mohr, WW4:Nov 75:405:11733
Engineering Challenges of Dredged Material Disposal, Robert M. Meccia, William C. Allanach and Fletcher H. Griffis, WW1:Feb 75:1:11096
Environmental Costs — Impact on Dredging, Carl C. Cable and William R. Pearson, DIEE:Jan 76:353
Evaluation of the Factors Influencing the Results of the Elutriate Test for Dredged Material Disposal Criteria, G. Fred Lee, Jose M. Lopez and M. D. Piwoni, DIEE:Jan 76:253
Experience in Using Dredge Material for Construction Purposes, Joseph H. Lamar and James E. Laier, DIEE:Jan 76:882
Feedback from Field Studies of Hydraulic Dredges, David R. Basco, WW3:Aug 75:277:11526
First Steps Toward Achieving Disposal Area Reuse, Raymond L. Montgomery and Michael R. Palermo, DIEE:Jan 76:529
Habitat Development on Dredged Material, Hanley K. Smith, DIEE:Jan 76:856
Hawaii's Offshore Runway, Wayne L. Rickerd, Preprint No.2696, Apr 76, 19pp.
Highlights of San Diego Convention, CE:June 76:67
Hydraulic and Environmental Effects of Commercial In-Stream Dredging, Paul G. Mayer, DIEE:Jan 76:947
Hydraulic Dredges, Including Boosters, Gail G. Gren, DIEE:Jan 76:115
Hydraulic Dredge Spoil for Land Reclamation, Carl W. Garbe and Kuei-wu Tsai, Preprint No.2678, Apr 76, 24pp.
Impact of Dredge and Fill on Coastal Economic Development, Andrew A. Dzurik, DIEE:Jan 76:378
Impact of Dredging on River System Morphology, Peter F. Lagasse and Daryl B. Simons, WW76:Aug 76:434
Impact of Dredging on Water Quality in Grays Harbor, Washington, John M. Smith, James B. Phipps, Eugene B. Schermer and Don F. Samuelson, DIEE:Jan 76:512
Impact of Public Law 92-532 on Dredging and Disposal, Kenneth S. Kamiet, DIEE:Jan 76:49
Investigation of the Elutriate Test, Thomas P. O'Connor, DIEE:Jan 76:299
Lead Analysis in Dredge Spoil Elutriates, Walter G. Cox, DIEE:Jan 76:242
Legislative Impact of P.L. 92-500 on Dredging, David H. Webb and Alfred P. Holmes, Jr., DIEE: Jan 76:83
Legislative Impacts on Dredging — General Regulatory Functions, Charles W. Hollis, DIEE:Jan 76:1
Maintenance Dredging and Four Polychaete Worms, James E. McCauley, Danil R. Hancock and Robert A. Parr, DIEE:Jan 76:673
Maintenance Dredging on the Arkansas River, Tasso Schmidgall, WW76:Aug 76:459
Marine Alternatives for Rapid Transit in Hawaii, Theodore T. Lee, WW76:Aug 76:107
Mechanical Dredges, Adolph W. Mohr, DIEE:Jan 76:125
Mobility of Trace Metals during Open Water Disposal of Dredged Material and Following Resedimentation, Kenneth Y. Chen, James C.S. Lu and Amancio Z. Sycip, DIEE:Jan 76:435
Modeling of Coastal Dredged Material Disposal, Stuart P. Bowen, DIEE:Jan 76:202
Modern Trends in Dredge Design, Thomas M. Turner, DIEE:Jan 76:173
New Method Dewaters Dredged Material, Cuts Lagooning Space, CE:Apr 75:90
Optimum Dredged Depth in Inland Waterway, Anatoly B. Hochstein, WW4:Nov 75:331:11698
Spartina Revegetation on Dredge Spoil in SE Marshes, William M. Dunstan, Gregory L. McIntire and Herbert L. Windom, WW3:Aug 75: 269:11530
Physicochemical Properties of Dredge Spoil, Alena Mudroch and Ales J. Zeman, WW2:May 75:201: 11317
The Port of Philadelphia — Past and Present, Clarence F. Wicker, Preprint No.2774, Sept 76, 20pp.
Predicting and Controlling Turbidity Around Dredging and Disposal Operations, William D. Barnard, DIEE:Jan 76:930
Quarantine Island Disposal Plan, George Marsch, DIEE:Jan 76:579
Recent Legislation Impacting on Dredging Projects, William L. Black, Preprint No.2727, Apr 76, 23pp.
Response of Carolina Beach Inlet to a Deposition Basin Dredged in the Throat, Adrian J. Combe, III and George M. Watts, DIEE:Jan 76:719
Return of Fines from Commercial Dredging to the Ohio River, James C. North and John Clark, DIEE:Jan 76:593
Sand Bypassing with Split-Hull Self-Propelled Barge Currituck, W. H. Sanderson, DIEE:Jan 76:163
Sedimentation Rates in the Upper Mississippi River, J. Roger McHenry, Jerry C. Ritchie and John Verdon, WW76:Aug 76:1339
Sediment Flushing after Dredging in Tidal Bays, Klas Cederwall and Torbjorn Svensson, HY7:July 76: 935:12229
Sediment-Water Interaction during Dredging Operations, John F. Sustar, Thomas H. Wakeman and Richard M. Ecker, DIEE:Jan 76:736
Side Scan Sonar Views of Channel Disturbances Associated with Marine Traffic and Dredging, Larry S. Slotta, DIEE:Jan 76:226
Silt Curtains for Dredging Turbidity Control, Edward E. Johanson, DIEE:Jan 76:990
Soil-Plant Relationships in Dredged Material Marshes with Particular Reference to Heavy Metal and Nutrient Availability, J. S. Boyce, DIEE:Jan 76:496
Stabilization of Polluted Dredgings by Electro-Osmosis, Raymond J. Krizek, Francis B. Gularte and Paul L. Hummel, Preprint No.2641, Apr 76, 30pp.
Stress-Deformation-Time Behavior of Dredgings, Abdelsalam M. Salem and Raymond J. Krizek, GT2:Feb 76:139.11917
A Study of the Effects of Maintenance Dredging on Selected Ecological Parameters in the Gulfport Ship Channel, Gulfport, Mississippi, Joseph W. Markey and Hugh D. Putnam, DIEE:Jan 76:821
A Study to Predict the Release of Metals from Hydraulically Dredged Material, William R. Gee, Robert W. George, John P. Hewitt and Kenneth B. Kim, WW76:Aug 76:492

Systems Analysis in Evaluating the Economics of New and Maintenance Dredging Projects, William W.L. Lee, DIEE:Jan 76:364
Thalweg Disposal of Riverine Dredged Material, Peter F. Lagasse, Daryl B. Simons and Yung H. Chen, DIEE:Jan 76:556
Time-Dependent Development of Strength in Dredgings, Raymond J. Krizek and Abdelsalam M. Salem, Preprint No.2640, Apr 76, 28pp.
Water Quality Effects of a Dredging Disposal Area, Raymond J. Krizek, Brian J. Gallagher and Gabor M. Karadi, EE2:Apr 76:389:12040
Waters of the United States, William L. Black, DIEE: Jan 76:10

Drift
The Influence of Water Depth on Ship Motion in Oblique Waves, C. H. Kim, OE75:June 75:653

Drilling
The Accelerated Deep Water Development System, R. D. Walker and J. J. Zdeb, Preprint No.2677, Apr 76, 30pp.
Behavior of Drilled Piers under Axial Loading, Lymon C. Reese, Fadlo T. Touma and Michael W. O'Neill, GT5:May 76:493:12135
Pressure Grouting Foundation on Teton Dam, Peter P. Aberle, GT76:Aug 76:245

Drilling Equipment
Pressure Grouting Foundation on Teton Dam, Peter P. Aberle, GT76:Aug 76:245

Drilling Rigs
New Jack-Up Drill Rig Extends Their Range Into 375-Ft Water Depth, CE:Apr 76:53

Droughts
Functions to Predict Optimal Irrigation Programs, J. Ian Stewart, Robert M. Hagan and William O. Pruitt, IR2:June 74:179:10626
Wet and Dry Periods of Annual Flow Series, Zekai Sen, HY10:Oct 76:1503:12457

Drydock Equipment
Thermal Effect Loads of Ships on Dock Floors, Greer W. Ferver and J. Richard Lawrence, Preprint No.2651, Apr 76, 10pp.

Drydocks
Electro-Osmosis Applied to Unstable Embankment, Brian A. Chappell and Peter L. Burton, GT8:Aug 75:733:11495
Fifty-Year Development of Naval Facilities Construction, Michael Yachnis, CO1:Mar 75:15: 11175
Floating Dry Dock Doubles as Launching Platform, Paul S. Crandall, CE:May 75:74
Thermal Effect Loads of Ships on Dock Floors, Greer W. Ferver and J. Richard Lawrence, Preprint No.2651, Apr 76, 10pp.

Drying
Diffusion of Water under Subfreezing Temperature, Jai P. Gupta and Stuart W. Churchill, TN: GT2: Feb 76:185:11885
Directional Drying Rates for Anisotropic Clays, Jack L. Rosenfarb, M. Salah Abdelhamid and Raymond J. Krizek, TN: GT2:Feb 76:188:11885
High-Temperature Drying of Thick Concrete Slabs, Harshavordhan C. Mehta, Wai F. Chen, John A. Manson and John W. Vanderhoff, TE2:May 76: 185:12102

Dual Mode Transportation Systems
Low-Energy Dual-Mode Transit, David M. Eggleston, Preprint No.2689, Apr 76, 12pp.

Ductility
Inelastic Cyclic Response of Split K-Braced Frames, Movses J. Kaldjian, Preprint No.2788, Sept 76, 15pp.

Dupuit-Forchheimer Theory
Hydrodynamics of Perched Mounds, Richard R. Brock, HY8:Aug 76:1083:12305

Durability
Durability of Concrete Construction—50 Years of Progress, Bryant Mather, CO1:Mar 75:5:11165
Durability of Concrete in Seawater, Povindar K. Mehta and Harvey H. Haynes, ST8:Aug 75:1679: 11516
Durability Tests on Some Aggregates for Concrete, L. Srinivasa-Iyer, Perry M. Rahn, Venkataswamy Ramakrishnan and James E. Russell, CO3:Sept 75: 593:11574
Structural Characteristics of Weathered Plywood, Michael O. Hunt and DeForest A. Matteson, Jr., ST4:Apr 76:759:12050

Dust Control
Vegetation and Urban Environment, Asadullah Zulfacar, UP1:May 75:21:11283

Dyes
Dye Catalyzed Oxidation of Industrial Wastes, Jerome W. Sargent and Robert L. Sanks, EE5:Oct 76:879:12453
Measurements of Estuary Dispersion Coefficients, Peter R.B. Ward, TN: EE4:Aug 76:855:12285

Dynamic Characteristics
Dynamic Behavior of Partially Embedded Pile, Muhammed A. Satter, GT7:July 76:775:12265
Seismic Design of Offshore Concrete Structures, Ben C. Gerwick, Jr. and Shighero Watanabe, Preprint No.2729, Apr 76, 8pp.

Dynamic Loads
Design of Building Floor Systems Subjected to Steady-State Dynamic Loads, Donald W. Vannoy, Furman W. Barton and Conrad P. Heins, ST76:Aug 76:720
Design of Cooling Towers for Wind, David P. Billington and John F. Abel, ST76:Aug 76:242
Forced Vibrations of Strip Footings on Layered Soils, George C. Gazetas and Jose M. Roesset, ST76:Aug 76:115
Fracture Sensitivity of Dynamically Loaded Girders, Donald S. Mansell and Peter Dobos, ST12:Dec 75: 2523:11754
Guide Criteria to Bridge and Permit Loads, David J. Chang, ST76:Aug 76:170
Response to Stochastic Wind of N-Degree Tall Buildings, William E. Saul, P. Jayachandran and Alain H. Peyrot, ST5:May 76:1059:12112
Uncertainties in Soil Structure Interaction, John T. Christian, STN75:Dec 75:II-105

Dynamic Models
Dynamic Finite Element Modeling of Near Field from San Fernando 1971 Earthquake, Samuel T. Harding and David Perkins, NMG:June 76:II-955
On Bidding—A Dynamic Model with One Competitor, Fletcher H. Griffis, Preprint No.2709, Apr 76, 28pp.

Dynamic Modulus of Elasticity
Evaluation of Resonant Column Test Devices, George R. Skoglund, William F. Marcuson, III and Robert W. Cunny, GT11:Nov 76:1147:12567

Dynamic Programming
Multistage Optimization of Structures, Lawrence A. Twisdale and Narbey Khachaturian, ST5:May 75: 1005:11297
Optimal Risk-Based Design of Storm Sewer Networks, Wilson H. Tang, Larry W. Mays and Ben Chie Yen, EE3:June 75:381:11360
Optimum Structural Design by Dynamic Programming, P. Packia Raj and S. Olani Durrant, ST8:Aug 76:1575:12329

Dynamic Properties

Applications of Integral Equation Method to Some Geomechanical Problems, Yoshiji Niwa, Shoichi Kobayashi and Takuo Fukui, NMG:June 76:I-120

Dynamic Response of Tropical Marine Limestone, Zen Yang and Allen W. Hatheway, GT2:Feb 76: 123:11893

Dynamic Response

Dynamic Analysis of the Slide in the Lower San Fernando Dam during the Earthquake of February 9, 1971, H. Bolton Seed, Izzat M. Idriss, Kenneth L. Lee and Faiz I. Makdisi, GT9:Sept 75:889:11541

Dynamic Buckling of Shallow Arches, David L.C. Lo and Ernest F. Masur, EM5:Oct 76:901:12493

Dynamic Response of Membranes with Finite Elements, Steven E. Benzley and Samuel W. Key, EM3:June 76:447:12217

Effects of Straining on Shear Modulus of Clays, Donald G. Anderson and Frank E. Richart, Jr., GT9:Sept 76:975:12428

Response to Stochastic Wind of N-Degree Tall Buildings, William E. Saul, P. Jayachandran and Alain H. Peyrot, ST5:May 76:1059:12112

Torsional Response of Rigid Embedded Foundation, Rany J. Apsel and Juan Enrique Luco, EM6:Dec 76:957:12627

Dynamics

Calculations to Test a Pack Ice Model, Max D. Coon, Roger Colony, Robert S. Pritchard and D. A. Rothrock, NMG:June 76:II-1210

Constitutive Laws for Sand in Dynamic Shear, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, NMG:June 76:I-270

Development of Finite Element Head Injury Model, Theodore A. Shugar and Michael G. Katona, EM3: June 75:223:11367

A Difference Scheme for the AIDJEX Sea Ice Model, Robert S. Pritchard and Roger Colony, NMG:June 76:II-1194

Dynamic Environment Simulation by Pulse Techniques, Sami F. Masri and Frederick B. Safford, EM1:Feb 76:151:11923

Dynamic Response of Embedded Machine Foundations, Kenneth H. Stokoe, II and Frank E. Richart, Jr., GT4:Apr 74:427:10499

Earthquake Design of Buildings:Damping, Gary C. Hart and Ramaswami Vasudevan, ST1:Jan 75:11: 11041

Energy Absorbing Boundary for Anisotropic Material, Somasundaram Valliappan, Weeks White and Ian K. Lee, NMG:June 76:II-1013

First Passage Probability for Nonlinear Oscillators, J. Brian Roberts, EM5:Oct 76:851:12469

Nonlinear Seismic Response of a Coupled Wall System, Stephen A. Mahin and Vitelmo V. Bertero, ST9:Sept 76:1759:12407

On the Accuracy of the Solution of Finite Element Equilibrium Equations, Klaus-Jurgen Bathe, NMG: June 76:I-82

Optimum Structural Design with Dynamic Constraints, Juan H. Cassis and Lucien A. Schmit, Jr., ST10:Oct 76:2053:12491

The Present Perspective of Edge Waves and Coastal Dynamics, Billy L. Edge, OE75:June 75:265

Seismic Interaction of Structures on Hysteretic Foundations, Anestis S. Veletsos and V. V. Damodaran Nair, ST1:Jan 75:109:11046

Seismic Response and Liquefaction of Sands, W. D. Liam Finn, Peter M. Byrne and Geoffrey R. Martin, GT8:Aug 76:841:12323

Seismic Response of Pipelines on Friction Supports, James C. Anderson and Anand K. Singh, EM2:Apr 76:275:12043

Stability and Dynamic Analyses of Cooling Tower, Chang-hua Yeh and William Y.J. Shieh, PO2:Nov 73:339:10141

Systematic Identification of DO-BOD Model Structure, Bruce Beck and Peter Young, EE5:Oct 76:909:12461

Time-Dependent Increase in Shear Modulus of Clay, Donald G. Anderson and Richard D. Woods, GT5: May 76:525:12147

Variable Energy Ratio Method for Structural Design, James W. Gorzynski and William A. Thornton, ST4:Apr 75:973:11266

Dynamic Stability

Aspects of Dynamic Stability of Structures, Horst H.E. Leipholz, EM2:Apr 75:109:11229

Dynamic Buckling of Shallow Arches, David L.C. Lo and Ernest F. Masur, EM5:Oct 76:901:12493

Dynamic Strength of Hydraulic Fill, Richard L. Meehan, TN: GT6:June 76:641:12169

Hybrid Techniques for Inelastic Dynamic Problems, Chang-Kuei Sun, ST4:Apr 75:889:11221

Resistance of Masonry Infill Walls to Out-of-Plane Dynamic Motion, Bernard L. Gabrielsen and Kenneth Kaplan, Preprint No.2771, Sept 76, 26pp.

Response of a Column in Random Vibration Tests, Gene K. Baxter and Ross M. Evan-Iwanowski, ST9:Sept 75:1749:11568

Tehri Rockfill Dam, B. V.K. Lavania, GT9:Sept 75: 963:11587

Tendon Control in Tall Structures, John Roorda, ST3:Mar 75:505:11168

Ultimate Instability of Earthquake Structures, Franklin Y. Cheng and Kenneth B. Oster, ST5:May 76:961:12117

Dynamic Structural Analysis

Aerodynamic Investigations of In-Line Slender Towers for Heavy Water Plants, K. R. Cooper, H. P.A.H. Irwin and R. L. Wardlaw, ST76:Aug 76:286

Analysis of Cable Dynamics—State-of-the-Art Summary, John H. Nath, OE75:June 75:623

Analysis of Cable-Stiffened Space Structures, Nicholas F. Morris, ST3:Mar 76:501:11998

Axial Hysteretic Behavior of Steel Members, Addison B. Higginbotham and Robert D. Hanson, ST7:July 76:1365:12245

California's Seismic Design Criteria for Bridges, James H. Gates, ST12:Dec 76:2301:12636

Design Spectra for Nuclear Power Plants, Ricardo A. Guzman and Paul C. Jennings, PO2:Nov 76:165: 12521

Determination of the Natural Modes of a Complex Elastic Structure in Terms of the Natural Modes of the Unconstrained Components, Jay S. Abramowitz, ST76:Aug 76:689

Dynamic Analysis of Curved Box-Girder Bridges, Rahmat Ollah Rabizadeh and Sidney Shore, ST9: Sept 75:1899:11561

Dynamic Analysis of Footings on Layered Media, Eduardo Kausel, Jose M. Roesset and Gunter Waas, EM5:Oct 75:679:11652

Dynamic Properties of Tall Shear-Wall Buildings, George T. Taoka, Augustine S. Furumoto and Arthur N.L. Chiu, ST2:Feb 74:305:10336

Dynamic Soil Structure Interaction, Jose M. Roesset, NMG:June 76:I-3

Dynamic Stiffness of Piles, G. W. Blaney, Eduardo Kausel and Jose M. Roesset, NMG:June 76:II-1001

Earthquake Behavior of Suspended-Floor Buildings, Barry J. Goodno and James M. Gere, ST5:May 76: 973:12105

Earthquake Finite Element Analysis of Structure-Foundation Systems, Ashok K. Vaish and Anil K. Chopra, EM6:Dec 74:1101:10990

Earthquake Resistant Design of Intake-Outlet Towers, Anil K. Chopra and C-Y. Liaw, ST7:July 75:1349:11422

Effects of Foundation Tipping on Dynamic Response, Jethro W. Meek, ST7:July 75:1297:11411

Elastic and Elasto-Plastic Computerized Dynamic Analysis of Frame Structures Subjected to Blast Overpressure, George S. Tseng, William Stea, Samuel Weissman, Norval Dobbs and Paul Price, ST76:Aug 76:977

Estimating Damping of Real Structures, Jon D. Raggett, ST9:Sept 75:1823:11554

Finite Element Analysis of Linear Dynamic Behavior, John S. Archer, Preprint No.2765, Sept 76, 30pp.

Free Vibration Analysis Using Substructuring, Gordon H. Holze and Arthur P. Boresi, ST12:Dec 75:2627:11788

Gust Factors for Hyperbolic Cooling Towers, Mahendra P. Singh and Ajaya K. Gupta, ST2:Feb 76:371:11894
Modal Analysis of Cable Networks, Nicholas F. Morris, ST1:Jan 75:97:11055
Natural Frequencies of a Turbine Foundation, Chung-Tung Shen and Norman E. Stone, STN75: Dec 75:II-302
Natural Vibrations of Suspension Cables, Harry H. West, Louis F. Geschwindner and Joseph E. Suhoski, ST11:Nov 75:2277:11712
Nonlinear Analysis of Foundation Vibrations, Mete Oner and Nilmar Janbu, NMG:June 76:II-1025
On the Accuracy of the Solution of Finite Element Equilibrium Equations, Klaus-Jurgen Bathe, NMG: June 76:I-82
Optimum Seismic Design of Linear Shear Buildings, Emilio Rosenblueth and Alejandro Asfura, ST5: May 76:1077:12119
Overall Elastic Stability of Multistory Buildings, R. Shankaran Nair, ST12:Dec 75:2487:11762
Preliminary Dynamic Assessment of Deepwater Platforms, Paul H. Wirsching and Peter H. Prasthofer, ST7:July 76:1447:12264
Response of Structures to Random Wind Forces, Michael J. O'Rourke, Richard A. Parmelee and Ross B. Corotis, ST12:Dec 75:2557:11786
Rigid Plastic Beam Model for Pipe Whip Analysis, Martin A. Salmon and Vijay K. Verma, EM3:June 76:415:12206
Seismic Behavior of K-Braced Framing Systems, James C. Anderson, ST10:Oct 75:2147:11636
The Seismic Design of the Dumbarton Bridge, Charles Seim, Preprint No.2811, Sept 76, 25pp.
Short Duration Analytic Earthquake, Gordon R. Johnson and Howard I. Epstein, ST5:May 76:993: 12109
Simulation of N-Degree Stochastic Wind Force Vector for the Three-Dimensional Dynamic Analysis of Tall Buildings, P. Jayachandran and William E. Saul, ST76:Aug 76:269
Soil Island Approach to Structure/Media Interaction, Ivan Nelson and Jeremy Isenberg, NMG:June 76:I-41
Solutions of Impact Problems for Structural Dynamic Analyses, Robert J. McCaffery, STN75:Dec 75:II-47
Some Finite Element Solutions in the Dynamics of Circular Footings, S. P. Dasgupta and N. S.V. Kameswara Rao, NMG:June 76:II-1038
Substitute-Structure Method for Seismic Design in R/C, Akenori Shibata and Mete A. Sozen, ST1:Jan 76:1:11824
Survey of Structural Reanalysis Techniques, Jasbir S. Arora, ST4:Apr 76:783:12056
Uncertainties in Soil Structure Interaction, John T. Christian, STN75:Dec 75:II-105

Dynamic Tests

Ambient Response Analysis of Some Tall Structures, George T. Taoka, Michael Hogan, Fazlur R. Khan and Robert H. Scanlan, ST1:Jan 75:49:11051
Saturated Sand and Cyclic Dynamic Tests, Y. Cho, Paul C. Rizzo and Wilfred K. Humphries, Preprint No.2752, Sept 76, 28pp.

Earthfill

Earthwork Volumes by Contour Method, Francis E. Smith, CO1:Mar 76:131:11977
Recent Results in French Research on Reinforced Earth, Francois Schlosser and Nguyen-Thanh-Long, CO3:Sept 74:223:10800
Roadside Slope Design for Safety, Eugene L. Marquis and Graeme D. Weaver, TE1:Feb 76:61: 11922

Earth Fills

Analysis of Buried Pipe Under Embankment, Shamsher Prakash, Gyan C. Nayak and R. Gupta, NMG:June 76:II-886
FE Analysis of Soil Movements Below a Test Embankment, Toru Shibata, Masanari Tominaga and Hajime Matsuoka, NMG:June 76:II-599
Nonlinear Analysis of Earth Structures, W. D. Liam Finn and Ronald Ian S. Miller, NMG:June 76:I-194
Reinforced Earth: A New Alternative for Earth Retention Structures, David S. Gedney and David P. McKittrick, CE:Oct 75:58

Earth Handling Equipment

Development and Future of Dredging, Adolph W. Mohr, WW2:May 74:69:10513

Earthmoving

Sand Bypassing with Split-Hull Self-Propelled Barge Currituck, W. H. Sanderson, DIEE:Jan 76:163

Earth Pressure

Analysis of Buried Pipe Under Embankment, Shamsher Prakash, Gyan C. Nayak and R. Gupta, NMG:June 76:II-886
At-Rest Lateral Earth Pressure of Consolidating Clay, M. Salah Abdelhamid and Raymond J. Krizek, GT7:July 76:721:12240
Consolidation Settlement of a Layered Subsurface, Surendra K. Saxena, Chandrakant S. Desai and Jayant Vir, NMG:June 76:II-1082
Earth Pressure on Precast Panel Retaining Wall, Harry M. Coyle and Richard E. Bartoskewitz, GT5: May 76:441:12113
Earth Pressures Measured with Hydraulic Piezometers, A. D.M. Penman, GT75:June 75:II-361
Lateral Earth Pressure at Rest in Soft Clay, K. Rainer Massarsch and Bengt B. Broms, GT10:Oct 76:1041:12476
New Foundations in an Old Neighborhood, Edmund G. Johnson, CE:Nov 76:50
A Numerical Analysis of the Maximum Earth Pressure Acting on Tunnel Lining, Shunsuke Sakurai and Yoshiaki Yamamoto, NMG:June 76:II-821
On the Distribution of Stress Around a Circular Tunnel Under Internal Pressure in Gravitating Plastic Ground with Frictional Resistance, Eiichi Oda and Takuo Yamagami, NMG:June 76:II-847
Performance of Tied-Back Walls in Clay, G. Wayne Clough and Yuet Tsui, GT12:Dec 74:1259:11028
Seismic Design of Reinforced Earth Walls, Gregory N. Richardson and Kenneth L. Lee, GT2:Feb 75: 167:11143
Studies on Anchored Flexible Walls in Sand, Thomas H. Hanna and Ibrahim I. Kurdi, GT10:Oct 74:1107: 10854
Tied-Back Deep Excavations in Los Angeles Area, Perry A. Maljian and James L. Van Beveren, CO3: Sept 74:337:10791

Earth Pressure Coefficient

Sheet Pile Interlock Tension-Probabilistic Design, James Neil Kay, GT5:May 76:411:12122
Soil Liquefaction by Torsional Simple Shear Device, Isao Ishibashi and Mehmet A. Sherif, GT8:Aug 74: 871:10752

Earthquake Damage

Dynamic Finite Element Modeling of Near Field from San Fernando 1971 Earthquake, Samuel T. Harding and David Perkins, NMG:June 76:II-955
Procedures for Evaluation of Earthquake Risk to Buildings, R. Martin Czarnecki, E. C. Wang and Sigmund A. Freeman, Preprint No.2804, Sept 76, 28pp.
Seismic Rehabilitation of Buildings With Special Importance, Daniel Shapiro, Preprint No.2787, Sept 76, 17pp.

Earthquake Engineering

System Identification of Frames under Seismic Loads, Nestor Distefano and B. Pena-Pardo, EM2: Apr 76:313:12047

Earthquake Loads

A Comparative Study of Structural Response to Explosion-Induced Ground Motions, Neal FitzSimons. Chmn., SREGM:75, 138pp.

Computerized Analysis of Rock Slope Stability, David S. Campbell, John T. Christian and Herbert H. Einstein, GT76:Aug 76:415
Consideration of Finite Element Representation, H. Bolton Seed, STN75:Dec 75:II-246
Constitutive Laws for Sand in Dynamic Shear, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, NMG:June 76:I-270
Dynamic Finite Element Modeling of Near Field from San Fernando 1971 Earthquake, Samuel T. Harding and David Perkins, NMG:June 76:II-955
Earthquake Response of Offshore Structures, Owen M. Kirkley and Joseph P. Murtha, OE75:June 75: 865
An Effective Stress Model for Liquefaction, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, Preprint No.2752, Sept 76, 30pp.
Equivalent Uniform Cycle Concept for Soil Dynamics, Mokhtar Annaki and Kenneth L. Lee, Preprint No.2752, Sept 76, 28pp.
Evaluation of an Existing Building Complex for Earthquake Response, Sigmund A. Freeman, ST76: Aug 76:781
Evaluation of Soil Liquefaction Effects on Level Ground During Earthquakes, H. Bolton Seed, Preprint No.2752, Sept 76, 104pp.
Policy-Making and Acceptable Earthquake Risk, Robert A. Olson, EFRLD:Sept 75:141
Relative Motion of Two Points during an Earthquake, John T. Christian, TN: GT11:Nov 76: 1191:12513
Scope of Input to Seismic Design Problem — Past Cooperation and Current Liason, Bruce C. Olsen, Preprint No.2812, Sept 76, 13pp.
Seismic Response of Pipelines on Friction Supports, James C. Anderson and Anand K. Singh, EM2:Apr 76:275:12043
Soil Pressure and Overturning Analyses of Structures Under Three Directional Seismic Loads by Using SRSS Combination, Frank J. Hsiu, STN75:Dec 75: II-331
A Structural Design Decision Methodology for Nuclear Power Plants, Samad Zendehrouh and Masanobu Shinozuka, ST76:Aug 76:517
Structural Design of Nuclear Plant Facilities, John D. Stevenson, Chmn., SDNPF:Dec 73
Vibration-Absorber Effect under Seismic Excitation, Richard G. Dong, ST10:Oct 76:2021:12495

Earthquake Resistant Structures

Anchorage Port Survives Nature, Harry Ekizian, CE: Dec 76:64
California Coastal Commission Accepts Advice from ASCE on Earthquake Design Controversy, Samuel H. Clark, CE:May 76:85
Development of Expectancy Maps and Risk Analysis, Neville C. Donovan, Bruce A. Bolt and Robert V. Whitman, Preprint No.2805, Sept 76, 19pp.
Dynamic Stiffness Matrices for Viscoelastic Half-Plane Foundations, Anil K. Chopra, P. Chakrabarti and Gautam Dasgupta, EM3:June 76:497:12209
Earthquake Design of Buildings:Damping, Gary C. Hart and Ramaswami Vasudevan, ST1:Jan 75:11: 11041
Earthquake Resistant Design of Intake-Outlet Towers, Anil K. Chopra and C-Y. Liaw, ST7:July 75:1349:11422
Earthquake Response of Offshore Structures, Owen M. Kirkley and Joseph P. Murtha, OE75:June 75: 865
Hybrid Techniques for Inelastic Dynamic Problems, Chang-Kuei Sun, ST4:Apr 75:889:11221
Optimal Aseismic Design of Building and Equipment, Shih-Chi Liu, M. R. Dougherty and F. Neghabat, EM3:June 76:395:12208
The Role of Geotechnical Engineering in Land Use Planning, Ronald C. Hirschfeld, EFEEC:Aug 75:65
Scope of Input to Seismic Design Problem — Past Cooperation and Current Liason, Bruce C. Olsen, Preprint No.2812, Sept 76, 13pp.
Seismic Analysis of Offshore Structures in the Inelastic Range, Joseph Kallaby, Preprint No.2722, Apr 76, 30pp.
Seismic Design Decision Analysis, Robert V. Whitman, John M. Biggs, C. Allin Cornell, John E. Brennan, III, Richard L. de Neufville and Erik H. Vanmarcke, ST5:May 75:1067:11309
Seismic Design of Non-Structural Building Systems, Alfred Goldberg, Preprint No.2756, Sept 76, 14pp.
Seismic Design of Offshore Concrete Structures, Ben C. Gerwick, Jr. and Shighero Watanabe, Preprint No.2729, Apr 76, 8pp.
The Seismic Design of the Dumbarton Bridge, Charles Seim, Preprint No.2811, Sept 76, 25pp.
Seismic Rehabilitation of Buildings With Special Importance, Daniel Shapiro, Preprint No.2787, Sept 76, 17pp.
Seismic Response of Reservoir-Dam Systems, E. Benjamin Wylie, HY3:Mar 75:403:11184
Structural Design of Nuclear Plant Facilities, John D. Stevenson, Chmn., SDNPF:Dec 73
Tall Buildings under Five-Component Earthquakes, Emilio Rosenblueth, TN: ST2:Feb 76:455:11886
Three Dimensional Seismic Analysis for a Floating Nuclear Plant Using Finite Element Procedures, Harry W. Johnson, Ashok K. Vaish and Frank L. Porter, Preprint No.2700, Apr 76, 23pp.
Torsional Response of High-Rise Buildings, Gary C. Hart, Roger M. DiJulio, Jr. and Marshall Lew, ST2: Feb 75:397:11126

Earthquakes

California's Seismic Design Criteria for Bridges, James H. Gates, ST12:Dec 76:2301:12636
Characteristics Method for Liquefaction of Soils, E. Benjamin Wylie and Victor L. Streeter, NMG:June 76:II-938
Computation of Seismic Induced Flow Landslide, Hung Tao Shen and Wen Huang, NMG:June 76:II-1054
Constitutive Laws for Sand in Dynamic Shear, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, NMG:June 76:I-270
Cyclic Loading Liquefaction of Gravelly Soils, Robert T. Wong, H. Bolton Seed and Clarence K. Chan, GT6:June 75:571:11396
Ductile Behavior of Coupled Shear Walls, Thomas Paulay and Arumbakkam R. Santhakumar, ST1:Jan 76:93:11852
Dynamic Analysis of the Slide in the Lower San Fernando Dam during the Earthquake of February 9, 1971, H. Bolton Seed, Izzat M. Idriss, Kenneth L. Lee and Faiz I. Makdisi, GT9:Sept 75:889:11541
Dynamic Environment Simulation by Pulse Techniques, Sami F. Masri and Frederick B. Safford, EM1:Feb 76:151:11923
Dynamic Finite Element Modeling of Near Field from San Fernando 1971 Earthquake, Samuel T. Harding and David Perkins, NMG:June 76:II-955
Dynamics of Marine Structures, Joseph P. Murtha, OE75:June 75:914
Dynamic Soil Structure Interaction, Jose M. Roesset, NMG:June 76:I-3
Dynamic Stiffness of Circular Foundations, Eduardo Kausel and Jose M. Roesset, EM6:Dec 75:771: 11800
Dynamic Stiffness of Piles, G. W. Blaney, Eduardo Kausel and Jose M. Roesset, NMG:June 76:II-1001
Earthquake Behavior of Suspended-Floor Buildings, Barry J. Goodno and James M. Gere, ST5:May 76: 973:12105
Earthquake Design of Buildings:Damping, Gary C. Hart and Ramaswami Vasudevan, ST1:Jan 75:11: 11041
Earthquake Finite Element Analysis of Structure-Foundation Systems, Ashok K. Vaish and Anil K. Chopra, EM6:Dec 74:1101:10990
"Earthquake Predictability and Public Policy," by the Panel on the Public Policy Implications of Earthquake Prediction (Book Review), Robert V. Whitman, CE:Jan 76:30
Effects of Foundation Tipping on Dynamic Response, Jethro W. Meek, ST7:July 75:1297:11411
Engineering Risk Management of Natural and Man-Made Hazards, Larry T. Lee and Jon D. Collins, Preprint No.2757, Sept 76, 30pp.

Evolutionary Spectra of Seismogram by Multifilter, Hiroyuki Kameda, EM6:Dec 75:787:11805
Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities, E. D'Appolonia, H. Bolton Seed, Robert V. Whitman, Shih-Lung Chu, Carl J. Costantino, Asadour H. Hadjian, Izzat M. Idriss, John Lysmer, R. Scavuzzo and Milomir Stoykovich, SDNPF:Dec 73:III-19
First Passage Probability for Nonlinear Oscillators, J. Brian Roberts, EM5:Oct 76:851:12469
Forces on Many Cylinders Near a Plane Boundary, Tokuo Yamamoto and John H. Nath, Preprint No.2633, Apr 76, 19pp.
Frame Interaction in Nonorthogonal Grids, Stephen Chriss, ST4:Apr 76:739:12031
General Panel — Summary of Presentations, John D. Stevenson, E. J. Keith, Nathan M. Newmark, R. E. Keever, Jack E. Cermak, H. Bolton Seed and M. J. Holley, SDNPF:Dec 73:III-81
Generation of Seismic Floor Spectra, Mahendra P. Singh, EM5:Oct 75:593:11651
The Hawkins Hydraulic Fill Dam, Kenneth L. Lee and Wolfgang Roth, Preprint No.2662, Apr 76, 20pp.
Historical Review of Earthquakes, Damage, and Building Codes, Glen V. Berg, ST76:Aug 76:387
Hydraulic Fill Dams/Earthquake Stability, Roney A. Heinz, CE:May 76:55
Hydrodynamic Forces on Multiple Circular Cylinders, Tokuo Yamamoto, HY9:Sept 76:1193:12395
Inelastic Cycles of Axially Loaded Steel Members, Lawrence F. Kahn and Robert D. Hanson, ST5:May 76:947:12111
Influence of Soil Models on Seismic Response, Adekunle Oguntala, NMG:June 76:II-1060
Liquefaction during 1906 San Francisco Earthquake, T. Leslie Youd and Seena N. Hoose, GT5:May 76:425:12143
Meeting the Earthquake Challenge: California's New Laws, Karl V. Steinbrugge and Henry J. Degenkolb, CE:Feb 75:44
Modal Analysis for Building-Soil Interaction, Jacobo Bielak, EM5:Oct 76:771:12451
Nonlinear Analysis of Earth Structures, W. D. Liam Finn and Ronald Ian S. Miller, NMG:June 76:I-194
Nonlinear Behavior in Soil-Structure Interaction, Eduardo Kausel, Jose M. Roesset and John T. Christian, GT11:Nov 76:1159:12579
Nonlinear Seismic Response of a Coupled Wall System, Stephen A. Mahin and Vitelmo V. Bertero, ST9:Sept 76:1759:12407
One-Dimensional Soil Transients by Characteristics, E. Benjamin Wylie and Victor L. Streeter, NMG: June 76:I-151
Optimum Design for Infrequent Disturbances, Emilio Rosenblueth, ST9:Sept 76:1807:12433
Planning the Tehachapi Crossing, Alfred R. Golze, HY1:Jan 75:1:11052
Pore-Water Pressure Changes during Soil Liquefaction, H. Bolton Seed, Philippe P. Martin and John Lysmer, GT4:Apr 76:323:12074
Preview—1976 Offshore Technology Conference, CE: Apr 76:67
Procedures for Evaluation of Earthquake Risk to Buildings, R. Martin Czarnecki, E. C. Wang and Sigmund A. Freeman, Preprint No.2804, Sept 76, 28pp.
Relative Motion of Two Points during an Earthquake, John T. Christian, TN: GT11:Nov 76:1191:12513
Scope of Input to Seismic Design Problem — Past Cooperation and Current Liason, Bruce C. Olsen, Preprint No.2812, Sept 76, 13pp.
Seismic and Cyclonic Response of Continuous Frames, Gerald M. Smith, George C. Ernst and Mahendra Maheshwari, ST2:Feb 74:391:10355
Seismic Behavior of K-Braced Framing Systems, James C. Anderson, ST10:Oct 75:2147:11636
Seismic Design Decision Analysis, Robert V. Whitman, John M. Biggs, C. Allin Cornell, John E. Brennan, III, Richard L. de Neufville and Erik H. Vanmarcke, ST5:May 75:1067:11309
Seismic Design of Liquid-Storage Tanks, Howard I. Epstein, ST9:Sept 76:1659:12380
Seismic Design Spectra for Nuclear Power Plants, Nathan M. Newmark, John A. Blume and Kanwar K. Kapur, PO2:Nov 73:287:10142
Seismic Instrumentation of Dams, Bruce A. Bolt and Donald E. Hudson, GT11:Nov 75:1095:11697
Seismic Interaction of Structures on Hysteretic Foundations, Anestis S. Veletsos and V. V. Damodaran Nair, ST1:Jan 75:109:11046
Seismic Qualification — Philosophy and Methods, Charles W. Roberts and George D. Shipway, PO1: Jan 76:113:11822
The Seismic Regime in a Minor Earthquake Zone, G. A. Bollinger, NMG:June 76:II-917
Seismic Response and Liquefaction of Sands, W. D. Liam Finn, Peter M. Byrne and Geoffrey R. Martin, GT8:Aug 76:841:12323
Seismic Response of Pipelines on Friction Supports, James C. Anderson and Anand K. Singh, EM2:Apr 76:275:12043
Seismic Response of Reservoir-Dam Systems, E. Benjamin Wylie, HY3:Mar 75:403:11184
Seismic Risk Map, CE:Dec 76:59
Seismic SSI of Nuclear Power Plant Structures, Izzat M. Idriss and Khosrow Sadigh, GT7:July 76:663: 12246
Seismic Supports for Electrical Cable Systems, Anil K. Kar and Sitansu S. Sinha, PO1:July 75:95:11464
Settlement of Sands under Multidirectional Shaking, Robert M. Pyke, H. Bolton Seed and Clarence K. Chan, GT4:Apr 75:379:11251
Shear Behavior of Steel Frame Joints, Helmut Krawinkler, Vitelmo V. Bertero and Egor P. Popov, ST11:Nov 75:2317:11717
Shear Strength of Soils and Cyclic Loading, Gonzalo Castro Salas and John T. Christian, GT9:Sept 76: 887:12387
Short Duration Analytic Earthquake, Gordon R. Johnson and Howard I. Epstein, ST5:May 76:993: 12109
Simulated Earthquake Tests of R/C Frames, Shunsuke Otani and Mete A. Sozen, ST3:Mar 74: 687:10435
The Slides in the San Fernando Dams During the Earthquake of February 9, 1971, H. Bolton Seed, Kenneth L. Lee, Izzat M. Idriss and Faiz I. Makdisi, GT7:July 75:651:11449
Soil Liquefaction by Torsional Simple Shear Device, Isao Ishibashi and Mehmet A. Sherif, GT8:Aug 74: 871:10752
Soil-Structure Interaction Analyses for Seismic Response, H. Bolton Seed, John Lysmer and Richard N. Hwang, GT5:May 75:439:11318
Some Geotechnical Aspects of Marginal Wharf Design, William Enkeboll and Vernon A. Smoots, Preprint No.2699, Apr 76, 24pp.
Strength of Slab-Column Connections with Shear and Unbalanced Flexure, Robert Park and Shafiqul Islam, ST9:Sept 76:1879:12419
Substitute-Structure Method for Seismic Design in R/C, Akenori Shibata and Mete A. Sozen, ST1:Jan 76:1:11824
Tall Buildings under Five-Component Earthquakes, Emilio Rosenblueth, TN: ST2:Feb 76:455:11886
Tendon Control in Tall Structures, John Roorda, ST3:Mar 75:505:11168
Test Method for Seismic Qualification of Equipment, Michael de Estrada, PO1:July 74:97:10656
Tests on Slab-Column Connections with Shear and Unbalanced Flexure, Shafiqul Islam and Robert Park, ST3:Mar 76:549:11972
Time-Dependent Increase in Shear Modulus of Clay, Donald G. Anderson and Richard D. Woods, GT5: May 76:525:12147
Towards Optimum Design Through Building Codes, Emilio Rosenblueth, ST3:Mar 76:591:11999
Ultimate Instability of Earthquake Structures, Franklin Y. Cheng and Kenneth B. Oster, ST5:May 76:961:12117
Vertical Seismic Response Spectra, Paul C. Rizzo, Donald E. Shaw and Matthew D. Snyder, PO1:Jan 76:121:11858

Earthquake Theory

Evaluation of an Existing Building Complex for Earthquake Response, Sigmund A. Freeman, ST76: Aug 76:781

Seismic Risk Analysis of Boston, C. Allin Cornell and Hans A. Merz, ST10:Oct 75:2027:11617

Earthquake Warning Systems

"Earthquake Predictability and Public Policy," by the Panel on the Public Policy Implications of Earthquake Prediction (Book Review), Robert V. Whitman, CE:Jan 76:30

Earthwork

Earthwork Volumes by Contour Method, Francis E. Smith, CO1:Mar 76:131:11977

Integrated Study of Reinforced Earth-I: Theoretical Formulation, Karl M. Romstad, Leonard R. Herrmann and Chih-Kang Shen, GT5:May 76:457: 12144

Past and Future of Construction Equipment — Part I, Franklin J. Larkin and Stuart Wood, Jr., CO2: June 75:309:11391

Scale Model Study of Los Angeles International Airport, Richard G. Cann, TE3:Aug 75:455:11489

Underwater Placement of Sand Fill at Port of Portland Terminal #6, Loren R. Anderson and John Ramage, Preprint No.2718, Apr 76, 20pp.

Ecology

Ecological Considerations in Transportation Systems, Beatrice E. Willard, EI3:July 75:329:11454

Ecology of Blue-Green Algal Viruses, Robert E. Cannon, Miriam S. Shane and Eugene DeMichele, EE6:Dec 74:1205:11012

Marine Ecological Impacts Associated with Power Plant Activities, B. J. Copeland and Frank N. Moseley, EFEEC:Aug 75:250

Session V —Ecology, C. Leland Rogers, EFEEC:Aug 75:417

A Study of the Effects of Maintenance Dredging on Selected Ecological Parameters in the Gulfport Ship Channel, Gulfport, Mississippi, Joseph W. Markey and Hugh D. Putnam. DIEE:Jan 76:821

Wastewater Recycling: Coupling Aquatic and Land Irrigation Systems, Darrell L. King and Thomas G. Bahr, IR76:July 76:128

Econometric Models

Internal Migration Models and Population Forecasts, Hatim M. Hajj, UP2:Nov 75:201:11680

Economic Analysis

Airport Upgrading Versus Landing Gear Optimization, Fletcher H. Griffis and M. A. Gammon, TE2:May 76:313:12137

Approximate Analysis and Economics of Structures, Niels C. Lind, ST6:June 76:1177:12201

Building and Operating Costs Versus Rental Income, Clayford T. Grimm, EI3:July 76:355:12270

Competition in the Transportation Industry, Dayle M. Clark and James J. Schwarzwalder, TE3:Aug 76:489:12290

Construction Economy: What Price Environmental Controls?, Harlan W. Fair, CO3:Sept 76:521:12427

Corps Guidelines for Dam Safety Inspection Need Revamping, Bob J. Buehler, CE:Jan 75:74

Cost and Pricing Relationships in Water Supply, Robert M. Clark, EE2:Apr 76:361:12025

Cost Effectiveness Maintenance-Management Systems, Gary N. Shofner, TE2:May 76:331:12133

Dams in Relation to Balanced Public Safety, Bob Buehler, EFRLD:Sept 75:27

Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., Preprint No.2643, Apr 76, 10pp.

Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., CO4:Dec 76:587:12600

Discounted Cash Flow Analysis to Select Equipment, Richard Briller, EE3:June 76:595:12190

Dynamic Programming Model for Wastewater Plant Investment, John M. Armstrong, EE5:Oct 76:985: 12466

Economic Analysis of Residential Land-Use Alternatives, David C. Curtis and Richard H. McCuen, UP2:Nov 75:109:11678

Economic and Social Issues of Our Cities, Phillip Hammer, UP1:Aug 76:69:12354

Economic Crisis of the 1930's and Water Resources Planning (Abstract), Marion E. Marts, Preprint No.2754, Sept 76, 2pp.

Economic Pipe Sizing in Pumped Irrigation Systems, Roland P. Perold, IR4:Dec 74:425:10988

Economic Role of the Waterway in Western Europe, Maurice Marchal, WW3:Aug 76:337:12346

Economics and Financial Aspects of Canadian Irrigation and Drainage Projects, Harry B. Rosenberg, IR76:July 76:640

Economics and Water Resources Planning in America: 1776-1976, L. Douglas James and Jerry R. Rogers, Preprint No.2754, Sept 76, 30pp.

Economics of Permanent Flood-Plain Evacuation, Nolan L. Johnson, Jr., IR3:Sept 76:273:12378

Engineering Risk Management of Natural and Man-Made Hazards, Larry T. Lee and Jon D. Collins, Preprint No.2757, Sept 76, 30pp.

Evaluating Air Pollution Impacts of Transportation, Edward C. Sullivan, TE4:Nov 75:763:11721

Evaluating Costs for Port Distribution Systems, Richard G. Waugh, Jr., WW4:Nov 75:385:11723

Evaluation and Implementation of Urban Drainage Projects, Neil S. Grigg, UP1:May 75:61:11324

Helicopter-Erected Tower Crane Demolishes Buildings, Charles R. Schrader, CE:May 75:60

Infiltration-Inflow Analysis, David J. Cesareo and Richard Field, EE5:Oct 75:775:11645

Mechanical Dredges, Adolph W. Mohr, DIEE:Jan 76:125

Methodology of Construction Industry Profiling: A Case History, Mark H. Jordan, EI1:Jan 76:67: 11864

Optimal Activated Sludge Design under Uncertainty, Arthur R. Tarrer, C. P. Leslie Grady, Jr., Henry C. Lim and Lowell B. Koppel, EE3:June 76:657:12207

Optimal Design for Highway Drainage Culverts, George K. Young, Jr., Mitchell R. Childrey and Roy E. Trent, HY7:July 74:971:10676

Optimal Risk-Based Design of Storm Sewer Networks, Wilson H. Tang, Larry W. Mays and Ben Chie Yen, EE3:June 75:381:11360

Optimizing Economic Return on Highway Investment, Robert L. Carstens, TE4:Nov 76:665: 12529

Optimum Dredged Depth in Inland Waterway, Anatoly B. Hochstein, WW4:Nov 75:331:11698

Optimum Size of Equipment, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:861:11772

Optimum Size of Hauling Units, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:853:11771

Policy-Making and Acceptable Earthquake Risk, Robert A. Olson, EFRLD:Sept 75:141

A Potential Irrigation-Conservation Program for 300,000 Acres in Northern Maine, Robert G. Hunt, Preprint No.2762, Sept 76, 23pp.

Project Formulation: Economic and Financial Aspects, Gary D. Cobb, IR76:July 76:660

Rail Transit Operating Cost Guidelines, Edward E. Gilcrease, Jr., Walter Kudlick and Manuel Padron, TE2:May 75:365:11314

Recent Legislation Impacting on Dredging Projects, William L. Black, Preprint No.2727, Apr 76, 23pp.

Regional Transport Development and Economic Growth, Kenneth A. Brewer and Robert O. Richards, Jr., TE2:May 76:271:12126

Review of Structural Optimization Techniques, Kenneth F. Reinschmidt, Preprint No.2765, Sept 76, 20pp.

Strategies for Alleviating Impact of Aircraft Noise, Adib Kanafani and Abdullah Mogharabi, TE4:Nov 75:657:11715

Transportation Energy Considerations, Alexander French, TE1:Feb 76:27:11919

Transportation for the 1980's and Its Effect on Energy, the Economy and the Environment, James T. Sullivan, Preprint No.2816, Sept 76, 4pp.

Water Reclamation: Technology and Public Acceptance, Ralph Stone, EE3:June 76:581:12193

Economic Conditions
Economic Crisis of the 1930's and Water Resources Planning (Abstract), Marion E. Marts, Preprint No.2754, Sept 76, 2pp.

Economic Development
Impact of Dredge and Fill on Coastal Economic Development, Andrew A. Dzurik, DIEE:Jan 76:378

Economic Factors
Dredged Material Disposal: Social Costs and Other Externalities, R. M. Pope, DIEE:Jan 76:398
Salary Guidelines, Robert C. West, EI2:Apr 75:287: 11212

Economic Feasibility
Economic Evaluation Techniques for Bicycle-Pedestrian Systems: A Case Study, Jack Dorman and Michael Everett, BP75:Dec 75:454

Economic Impact
Economic Impact of Dredging Regulations, Frank C. Boerger and Michael H. Cheney, DIEE:Jan 76:408

Economic Justification
Economic Pipe Sizing for Gravity Sprinkler Systems, Roland P. Perold, IR2:June 74:107:10583

Economic Models
Competition in the Transportation Industry, Dayle M. Clark and James J. Schwarzwalder, TE3:Aug 76:489:12290

Economics
Development of Storm Drainage Cost Functions, Neil S. Grigg and John P. O'Hearn, HY4:Apr 76: 515:12069
Economics of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO2:Nov 76:147:12515
Energy-Intensive Analysis of Truck Transportation, Balakrishnamurthy Ashtakala, TE2:May 75:225: 11289
Equivalent Pipe Methods for Optimizing Water Networks--Facts and Fallacies, Pramod K. Swamee and P. Khanna, EE1:Feb 74:93:10375
Evaluating Economic and Energy Consequences of Land-Use Decisions, Robert S. DeVoy, UP1:Aug 76:105:12331
Learning and Experience Curves, Marvin Gates and Amerigo Scarpa, CO1:Mar 72:79:8778
Local and Regional Economic Impacts of Energy Complexes, Courtney Riordan, EFEEC:Aug 75:312
Monetary Values of Life and Health, Bob Buehler, HY1:Jan 75:29:11047
Scope of Socio-Economics Considerations, E. J. Schmidt, EFEEC:Aug 75:272
Social Science Emphasis in Engineering Education, Dan H. Pletta, EI4:Oct 75:509:11664
Thermodynamic Models of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:1:11829

Eddies
Length of Hydraulic Jump, Subhash C. Mehrotra, HY7:July 76:1027:12272
Role of Eddy Diffusivity in Thermocline Formation, Brian Henderson-Sellers, EE3:June 76:517:12174

Edge Effect
Membrane Solutions for Shells with Edge Constraint, Charles R. Steele, EM3:June 74:497:10605
Numerical Solution of Moderately Thick Plates, Rajabhau S. Deshmukh and Robert R. Archer, EM5:Oct 74:903:10860
The Present Perspective of Edge Waves and Coastal Dynamics, Billy L. Edge, OE75:June 75:265

Edmund Friedman Award
1976 Edmund Friedman Professional Recognition Award Presented to Jack E. McKee, CE:Oct 76: 102
1976 Edmund Friedman Young Engineer Award for Professional Achievement Presented to Robert E. Heightchew, Jr., Dean M. Golden, and Richard J. Scranton, CE:Oct 76:102

Education
Bicycles and Traffic, Harold C. Munn, TE4:Nov 75: 753:11729
Building a Professionally Qualified Faculty, King S. Luk and Eugene H. Kopp, EI2:Apr 74:105:10466
Building Construction Management Game, Kenneth F. Reinschmidt, James W. Litchfield and Steven D. Hunt, EI2:Apr 75:117:11248
Education and Enforcement — The Sine Qua Non of the New Traffic-Mix, Larry Wuellner, BP75:Dec 75:548
Education and Training in Water Resources Planning, Alvin S. Goodman, WR2:Nov 76:209:12555
Education of Bicycle Riders - How Much is Enough?, John E. Baerwald, BP75:Dec 75:545
Education, Research, and Productivity in Construction, Boyd C. Paulson, Jr., PROD:Aug 76: 187
Environmental Impact Statements and Civil Engineering, Martin P. Wanielista, Waldron M. McLellon and Lawrence L. Smith, EI3:July 75:321: 11418
Goals for Education and Research in Construction, Boyd C. Paulson, Jr., CO3:Sept 76:479:12393
Motivating Students Towards Professional Thinking, Joseph M. DeSalvo, EI1:Jan 75:47:11081
Past and Future of Contract Administration, Woodrow W. Wilson, CO3:Sept 75:559:11560
Professional Development—An Educator's Viewpoint, Alfred C. Ingersoll, EI4:Oct 75:471: 11660
Urban Sediment Problems: A Statement on Scope, Research, Legislation and Education, Harold P. Guy, Chmn., HY4:Apr 75:329:11256
A Viewpoint for the Traditional Approach to Structural Engineering Education, Donald R. Sherman, 1976

Education-Practice Interchange
Canadian University to Launch Building-Engineering Program, Alan D. Russell and Paul P. Fazio, CE: Apr 75:86
Civil Engineering Curricula: Well-Rounded or Overweight?, George K. Wadlin, EI2:Apr 76:159: 12083
Civil Engineering: Education and Practice, Emory L. Kemp, EI1:Jan 76:17:11868
Education for Construction, Albert G.H. Dietz and William A. Litle, CO2:June 76:347:12182
An Employer's Evaluation of Cooperative Education, Robert W. Richards, EI2:Apr 75:221:11238
Engineering Education: Can It be More Practical?, Robert W. Richards, CE:July 75:60
Engineering Education for Engineering Practice, Cornelius Wandmacher, EI2:Apr 75:227:11250
Engineering Educator-Practitioner Interchange: Challenge, David Novick, EI1:Jan 76:21:11865
Half a Century of Soil Mechanics—Some Thoughts for the Future in the Light of the Past, Gregory P. Tschebotarioff, EI3:July 76:321:12251
The Making of a "Pro"—A Faculty Viewpoint, Dan H. Pletta, EI3:July 74:217:10645
Reforming Civil Engineering Education, Robert M. Sykes, CE:July 75:61
Responding to Our Members' Educational Needs, Edward W. Timmons, Jr., EI1:Jan 76:41:11869
The Translation of Research Results Into Practice, George Bugliarello, IR76:July 76:1
Why A Co-op Program—A Student's Point of View, Douglas J. Marshall, EI2:Apr 75:243:11264

Effective Stress
Effective Stress-Strain-Strength Model for Soils, Jean-Herve Prevost and Kaare Hoeg, GT3:Mar 75:259: 11157

Efficiency
Productivity as Influenced by Design Management Processes, Winfield O. Salter, PROD:Aug 76:1

Septic Tank Efficiency, Thiruvenkatachari Viraraghavan, TN: EE2:Apr 76:505:12016

Effluent Fees
Simulation of Water Quality Management Policies, John W. Hyden, James A. Chisman and Hugh H. Macaulay, EE4:Aug 75:623:11524

Effluent Reuse
Effluent Irrigation of Pearl Millet, Allen R. Overman, EE2:Apr 75:193:11233
Effluent Irrigation of Rye and Ryegrass, Allen R. Overman and Hsiao-Ching Ku, EE2:Apr 76:475:12035

Effluents
Equalization of Time Variable Waste Loads, Vladimir Novotny and Robert M. Stein, EE3:June 76:613:12191
Evolution of 208 Water-Quality Planning, Leon G. Billings, CE:Nov 76:54
Simulation of Quality of Urban Drainage Effluents, Jiri Marsalek, IR76:July 76:564

Egypt
River Regime with Special Reference to River Nile, Mohamed Bakr Khalil, HY1:Jan 75:135:11072

Eigenvalues
End Effects in Long Curved Beam, Bellur S. Ramachandra Rao, S. Gopalacharayulu and N. B. Shukla, EM1:Feb 76:19:11920
Roundoff Error Characteristics in Direct Stiffness Solutions, Farouk S. Nasser, ST76:76:374

Eigenvectors
Roundoff Error Characteristics in Direct Stiffness Solutions, Farouk S. Nasser, ST76:76:374

Elastic Analysis
Elastic Analysis of Rectangular Box Girders by Finite Element Method, Cetin Yilmaz and Ben T. Yen, ST76:Aug 76:1023
Solutions of Impact Problems for Structural Dynamic Analyses, Robert J. McCaffery, STN75:Dec 75:II-47

Elastic Deformation
Static Stresses by Linear and Nonlinear Methods, Kenneth L. Lee and Izzat M. Idriss, GT9:Sept 75:871:11542
Test Loading of Piles and New Proof Testing Procedure, Bengt H. Fellenius, GT9:Sept 75:855:11551

Elastic Foundations
Buckling of Cantilever Bars on Elastic Foundations, James T.S. Wang, TN: EM4:Aug 76:731:12286
Discrete Model of Beams on Elastic Foundation, Gregory Szuladzinski, EM6:Dec 75:839:11814
Prestressed Strip on Elastic Foundation, George J. Tsamasfyros and Pericles S. Theocaris, TN: EM5:Oct 76:927:12443

Elasticity
Analysis of Pressuremeter in Strain-Softening Soil, Jean-Herve Prevost and Kaare Hoeg, GT8:Aug 75:717:11488
Avoidance of Parasitic Shear in Plane Element, Robert D. Cook, ST6:June 75:1239:11370
Axisymmetrical Deformation of Bimodulus Orthotropic Circular Cylindrical Shell, Norio Kamiya, EM1:Feb 76:89:11916
Constrained and Shear Moduli for Finite Element, Vincent P. Drnevich, GT5:May 75:459:11319
Effective Stress-Strain-Strength Model for Soils, Jean-Herve Prevost and Kaare Hoeg, GT3:Mar 75:259:11157
Elastic Behavior of Tapered Monosymmetric I-Beams, Sritawat Kitipornchai and Nicholas S. Trahair, ST8:Aug 75:1661:11479
Iterative Improvement of Finite Element Approximations, Ranbir S. Sandhu, U. Salaam and K. J. Singh, NMG:June 76:I-104
Nonlinear Analysis of RC Shells of General Form, Cheng-Shung Lin and Alexander C. Scordelis, ST3:Mar 75:523:11164
Non-Linear Elastic Approximations of the Behaviour of Soils, Arnold Verruijt, NMG:June 76:III-1321
Non-Linear Flow and Deformation Analysis of Consolidated Problems, Roland W. Lewis, G. W. Roberts and Olgierd C. Zienkiewicz, NMG:June 76:II-1106
A Numerical Analysis of the Maximum Earth Pressure Acting on Tunnel Lining, Shunsuke Sakurai and Yoshiaki Yamamoto, NMG:June 76:II-821
On the Distribution of Stress Around a Circular Tunnel Under Internal Pressure in Gravitating Plastic Ground with Frictional Resistance, Eiichi Oda and Takuo Yamagami, NMG:June 76:II-847
Post-Buckling of Redundant I-Beams, Scott T. Woolcock and Nicholas S. Trahair, EM2:Apr 76:293:12054
Post-Buckling of Redundant Rectangular Beams, Scott T. Woolcock and Nicholas S. Trahair, EM4:Aug 75:301:11491
Stress-Path Independent Behavior of Cohesionless Soil, Poul V. Lade and James M. Duncan, GT1:Jan 76:51:11841

Elastic Modulus
Nonlinear Analysis of Foundation Vibrations, Mete Oner and Nilmar Janbu, NMG:June 76:II-1025
Vibratory In Situ and Laboratory Soil Moduli Compared, Robert W. Cunny and Zelma B. Fry, SM12:Dec 73:1055:10219

Elastic-Plastic Analysis
Computer Analysis of Steel Frame in Fire, Wun-Chau Cheng and Cary K. Mak, ST4:Apr 75:854:11262
Elastic-Plastic Torsion of Nonhomogeneous Bars, Carl T. Herakovich and Rafik Y. Itani, EM5:Oct 76:757:12446
Elasto-Plastic Finite Element Analyses of Sand Deformations, Yoshio Ozawa and James M. Duncan, NMG:June 76:I-243

Elastic Properties
Cracking Analysis of Reinforced Concrete Plates, Maharaj K Wanchoo and Gerald W. May, ST1:Jan 75:201:11059
Drawdown in Compressible Unconfined Aquifer, Tatiana D. Streltsova, HY11:Nov 74:1601:10950
Evaluation of Three Stress-Strain Models for Soils, Jean-Marie J. Vagneron, Poul V. Lade and Kenneth L. Lee, NMG:June 76:III-1329
Improved Two-Dimensional Finite Element, Robert D. Cook, ST9:Sept 74:1851:10808
Influence of Soil Models on Seismic Response, Adekunle Oguntala, NMG:June 76:II-1060
Interpretation of Torsion Shear Tests on Sand, Poul V. Lade, NMG:June 76:I-381
Load-Induced Strains in Hardened Cement Paste, Leslie J. Parrott and John M. Illston, EM1:Feb 75:13:11118
Response of Footings on Micaceous, Cohesionless Soils, Jean M.E. Audibert, Nabil F. Ismael and G. Wayne Clough, NMG:June 76:I-567
Settlement of Building on Pile Foundation in Sand, Robert M. Koerner and Antal Partos, GT3:Mar 74:265:10405
Some Finite Element Solutions in the Dynamics of Circular Footings, S. P. Dasgupta and N. S.V. Kameswara Rao, NMG:June 76:II-1038
Tension Proof Loading for Southern Pine Beams, M. Dee Strickler and Roy F. Pellerin, ST3:Mar 76:645:11978
Thick Plates on Elastic Foundations by Finite Elements, Otto J. Svec, EM3:June 76:461:12215
Three-Dimensional Analysis of Vertical Pile Groups, Prasanta K. Banerjee and Richard M. Driscoll, NMG:June 76:I-438
Vortex-Excited Oscillations of Elastic Cylinders, Richard A. Skop and Owen M. Griffin, OE75:June 75:535

Elasto-Plastic
Elastoplastic Analysis of Coupled Shear Walls, Kumarapillai K. Nayar and Alexander Coull, ST9: Sept 76:1845:12401
Elastoplastic Stress-Strain Theory for Cohesionless Soil, Poul V. Lade and James M. Duncan, GT10: Oct 75:1037:11670
Evaluation of Three Stress-Strain Models for Soils, Jean-Marie J. Vagneron, Poul V. Lade and Kenneth L. Lee, NMG:June 76:III-1329
Interpretation of Torsion Shear Tests on Sand, Poul V. Lade, NMG:June 76:I-381
Projectile Penetration of Elastic-Plastic Earth Media, Lewis Thigpen, GT3:Mar 74:279:10414
Ultimate Live Load Distribution Factor for Bridges, Conrad P. Heins and John T.C. Kuo, ST7:July 75: 1481:11443

Elections
Political Involvement of Civil Engineers, Allen W. Hatheway, EI1:Jan 76:11:11866
Professional Engineers as Elected Local Officials, Kenneth R. Wright and Douglas T. Sovern, EI4: Oct 76:447:12504
Unemployment, Public Works, and the 1976 Presidential Election Campaign, Kneeland A. Godfrey, Jr., CE:Oct 76:82

Electrical Stability
Electro-Osmotic Consolidation of Soils, Tai-Yeu Wan and James K. Mitchell, GT5:May 76:473:12156

Electric Cables
Kink Formation and Rotational Response of Single and Multistrand Electromechanical Cables, Francis C. Liu, OE75:June 75:546

Electric Measuring Instruments
Electrical Detection of Waves at Water-Air Surface, B. Vonnegut and R. Markson, OE75:June 75:1137

Electric Power Generation
Converting Solar Energy to Hydrogen: Answer to U.S.'s Long-Range Energy Needs?, Dean Garyet, CE:Jan 76:63
Experimental Methods and Instrumentation for Power Generation Structures — Some Case Studies, Joseph W. Fortey and Raymond R. Funk, Preprint No.2717, Apr 76, 25pp.
Keowee-Toxaway Power Project — OUTSTANDING, Roney A. Heinz, CE:June 75:46
Water and Power in the Northeast, Eugene O'Brien, Clarence N. Freeman and John H. Dixon, Preprint No.2688, Apr 76, 22pp.

Electric Power Industry
Factoring in Public Participation: Suggestions for Industry, Henry Herrmann, EFEEC:Aug 75:394

Electric Power Plants
Impact Assessment of Power Plants, D. Joseph Hagerty and John E. Heer, PO1:Jan 76:81:11823

Electric Power Production
Some Factors Affecting Land Use for Energy Centers, Harry A. Kornberg, EFEEC:Aug 75:48

Electric Power Sources
Civil and Environmental Engineering Aspects of Energy Complexes, Alvin S. Goodman, Editor, EFEEC:Aug 75
Impact of Energy Complexes on Freshwater Environments, Loren D. Jensen, EFEEC:Aug 75: 235
Inland Site Location in the Northeast with Emphasis on Water Supply Needs, Clarence N. Freeman and John H. Dixon, EFEEC:Aug 75:92
Local and Regional Economic Impacts of Energy Complexes, Courtney Riordan, EFEEC:Aug 75:312
The Nuclear Energy Center Impact on Land Use, Frank A. Jenkins, EFEEC:Aug 75:73
Public Participation in the Fuel Cycle: Experiences and Perspectives, Robert E. Olson, EFEEC:Aug 75: 381
The Role of Geotechnical Engineering in Land Use Planning, Ronald C. Hirschfeld, EFEEC:Aug 75:65
Session I — Objectives (Introduction), Jan C. Philips, EFEEC:Aug 75:404
Session VIII — Public Participation, Kenneth F. Rosanski, EFEEC:Aug 75:428
Some Factors Affecting Land Use for Energy Centers, Harry A. Kornberg, EFEEC:Aug 75:48
A State Government View of Energy Complexes, James E. Harrington, EFEEC:Aug 75:59
Water Supply for Energy Complexes in Water-Short Regions, Gilbert G. Stamm and Kenneth O. Kauffman, EFEEC:Aug 75:147

Electric Railroads
Air Pollution Impact of Railroad Electrification, Hal B.H. Cooper, Jr., Hoy A. Richards and Aaron T.B. Lam, EE4:Aug 76:723:12312

Electrochemistry
Electro-Osmosis Applied to Unstable Embankment, Brian A. Chappell and Peter L. Burton, GT8:Aug 75:733:11495

Electromechanics
Kink Formation and Rotational Response of Single and Multistrand Electromechanical Cables, Francis C. Liu, OE75:June 75:546

Electronic Equipment
Los Angeles Tackles Freeway Congestion, Kneeland A. Godfrey, Jr., CE:Sept 75:96
Simultaneous Geodimeter and Tellurometer Distances, Wolfgang M. Gopfert, SU1:Oct 75:89: 11623

Electroosmosis
Electro-Osmosis Applied to Unstable Embankment, Brian A. Chappell and Peter L. Burton, GT8:Aug 75:733:11495
Electro-Osmotic Consolidation of Soils, Tai-Yeu Wan and James K. Mitchell, GT5:May 76:473:12156
Stabilization of Polluted Dredgings by Electro-Osmosis, Raymond J. Krizek, Francis B. Gularte and Paul L. Hummel, Preprint No.2641, Apr 76, 30pp.
Treatment of Soft Foundations — A Review of Current Practice, Ara Arman, Preprint No.2797, Sept 76, 36pp.

Elevated Railroads
Vibration Measurements of Steel Transit Structures, Marshall L. Silver and Thomas Venema, ST9:Sept 75:1855:11557

Elevated Structures
Minimum Cost Design of Elevated Transit Structures, Antoine E. Naaman and Marshall L. Silver, CO1:Mar 76:99:11986
Skew and Elevated Support Effects on Curved Bridges, Donald W. Funkhouser and Conrad P. Heins, ST7:July 74:1379:10670

Elevators (Lifts)
Birth of the Skyscraper, CE:July 76:61
Job-Site Innovations Slash Time, Cost of Constructing Canada's Tallest Skyscraper, Keith E. Roberts, CE:Aug 76:42

Elutriation
Bioassessment of the Standard Elutriate Test, Peter J. Shuba, Joe H. Carroll and Henry E. Tatem, DIEE: Jan 76:645
Elutriation of Dredge Material in New Orleans Harbor, Charles Grimwood and Terence J. McGhee, WW76:Aug 76:476
Evaluation of the Factors Influencing the Results of the Elutriate Test for Dredged Material Disposal Criteria, G. Fred Lee, Jose M. Lopez and M. D. Piwoni, DIEE:Jan 76:253
Investigation of the Elutriate Test, Thomas P. O'Connor, DIEE:Jan 76:299

Sediment and Elutriate Toxicity to Oyster Larvae, Rick D. Cardwell, Charles E. Woelke, Mark I. Carr and Eugene W. Sanborn, DIEE:Jan 76:684

Embankments
Analysis of a Test Embankment Considering the Anisotropy of the Soil, Hakan Stille, A. Fredriksson and Bengt B. Broms, NMG:June 76:II-611
Analysis of Shear-Induced Anisotropy in Leda Clay, K. T. Law and Kwan Y. Lo, NMG:June 76:I-329
Embankment Loading of Hydraulic Fill, Timothy K. Dahlstrand, Preprint No.2649, Apr 76, 14pp.
Numerical Analysis of Embankments over Soft Soils, Robert L. Thoms, Richard A. Pecquet and Ara Arman, NMG:June 76:II-623
Seismic Evaluation of Embankments, Richard W. Kramer, NMG:June 76:III-1445
Settlement of Thawing Embankment, Bernard D. Alkire, Wilbur M. Haas and James J. Botz, TN: GT8:Aug 76:877:12287
Stability of Embankment on Clay, Tien H. Wu, William B. Thayer and Sheng S. Lin, GT9:Sept 75: 913:11584

Embedding
Dynamic Behavior of Partially Embedded Pile, Muhammed A. Satter, GT7:July 76:775:12265
Holding Capacity of Direct Embedment Anchors, Richard M. Beard and Homa J. Lee, OE75:June 75:470
Session 6: Soil Structure Interaction — Finite Element, Lumped Parameter, John R. Hall, Jr., STN75:Dec 75:II-206
Stiffness Coefficients for Embedded Footings, Gordon R. Johnson, Paul P. Christiano and Howard I. Epstein, GT8:Aug 75:789:11522
Stress Distribution for Heavy Embedded Structures, Kul Bhushan and Steven C. Haley, TN: GT7:July 76:807:12227
Torsional Response of Rigid Embedded Foundation, Rany J. Apsel and Juan Enrique Luco, EM6:Dec 76:957:12627

Emergencies
Emergency Assistance on Flood Damage in North Dakota Under Section 216 of the Flood Control Act of 1950, A. Richard Moum, IR76:July 76:76
Emergency Protection for Flood Damaged Streams, Donald W. Shanklin, IR76:July 76:85

Emission
Acoustic Emission Behavior of Granular Soils, Robert M. Koerner, Arthur E. Lord, Jr., W. Martin McCabe and John W. Curran, GT7:July 76:761: 12239

Employee Relations
An Employer's Evaluation of Cooperative Education, Robert W. Richards, EI2:Apr 75:221:11238
The Human Potential Movement, Laurence Loeb, CE:Jan 76:66
Is There Anything to 'Encounter Groups'?, Kneeland A. Godfrey, Jr., CE:Jan 76:67
Salary Guidelines, Robert C. West, EI2:Apr 75:287: 11212

Employment
Affirmative Action Toward Equal Opportunity, Benito A. Sinclair, CE:Feb 75:69
Construction Economy: What Price Environmental Controls?, Harlan W. Fair, CQ3:Sept 76:521:12427
The Effect of Regulations on Productivity, J. C. Turner, PROD:Aug 76:257
Employee Benefits, Kneeland A. Godfrey, Jr., CE:Jan 75:76
The Human Potential Movement, Laurence Loeb, CE:Jan 76:66
Is There Anything to 'Encounter Groups'?, Kneeland A. Godfrey, Jr., CE:Jan 76:67
Quantity Instead of Quality: A Sabotage of Engineering and Its Education by "Engineer Shortage" Propaganda?, Milton Alpern, EI4:Oct 76: 457:12501
Salary Guidelines, Robert C. West, EI2:Apr 75:287: 11212
Statement of Affirmative Action Principles, Benito A. Sinclair, EI3:July 74:183:10688
Success Model for Minority Engineering Programs, Norman J. Johnson and E. Louis Overstreet, EI1: Jan 75:67:11084
Unemployment, Public Works, and the 1976 Presidential Election Campaign, Kneeland A. Godfrey, Jr., CE:Oct 76:82

Employment Opportunities
Employee Benefits, Kneeland A. Godfrey, Jr., CE:Jan 75:76
Statement of Affirmative Action Principles, Benito A. Sinclair, EI3:July 74:183:10688

Encephalitis
Impact of Water Resources on Vector-Borne Diseases, Richard O. Hayes, WR2:Nov 76:177: 12526

Energy
Air Pollution Factors in the Planning of Energy Complexes, Maynard E. Smith, EFEEC:Aug 75:211
America's Energy Futures, Monte Canfield, Jr., EFEEC:Aug 75:6
Citizens Groups and Public Participation: Problems and Observations, Jonathan N. Brownell, EFEEC: Aug 75:388
Civil Engineering and Offshore Construction, Ben C. Gerwick, Jr., Preprint No.2753, Sept 76, 6pp.
Coastal Power Plant Heat Disposal Considerations, Dean M. Golden, EE3:June 75:365:11359
Community Development Implications of Energy Complex Construction, C. R. Cavanagh, EFEEC: Aug 75:280
Concrete in Water Resource and Energy Development, Harold G. Arthur, Preprint No.2741, Sept 76, 30pp.
Conowingo-Peach Bottom Energy Complex: Financial, Legal and Public Relations Aspects, W. H. Johnson, EFEEC:Aug 75:292
Conservation of Energy in Buildings, Vance L. Sailor, CO3:Sept 74:295:10795
Desirable Modifications in Regulatory and Licensing Activities, Gerald Charnoff, EFEEC:Aug 75:356
Ductile Behavior of Coupled Shear Walls, Thomas Paulay and Arumbakkam R. Santhakumar, ST1:Jan 76:93:11852
Effect of Energy Shortage and Land Use on Auto Occupancy, Jahanbakhsh Behnam and Robert E. Beglinger, TE2:May 76:255:12142
The Effect of Regulations on Productivity as Viewed by the Engineer, Billy T. Sumner, PROD:Aug 76: 219
Energy Absorbing Boundary for Anisotropic Material, Somasundaram Valliappan, Weeks White and Ian K. Lee, NMG:June 76:II-1013
Energy and Pollution Concerns in Dredging, Adolph W. Mohr, WW4:Nov 75:405:11733
Energy Complexes — Conceptual Arrangements, Ralph W. Gunwaldson, EFEEC:Aug 75:19
Energy Complexes: The Federal Government's Views, R. Michael Hartman, EFEEC:Aug 75:334
The Energy Crisis/Bicycles/Federal Government, Nina Dougherty Rowe, BP75:Dec 75:19
Energy Inputs to Irrigation, J. Clair Batty, Safa N. Hamad and Jack Keller, IR4:Dec 75:293:11810
Energy-Intensive Analysis of Truck Transportation, Balakrishnamurthy Ashtakala, TE2:May 75:225: 11289
Energy Recovery from Refuse—State-of-the- Art, John Payne, EE2:Apr 76:281:12027
Energy-Wastewater Treatment and Solids Disposal, William F. Garber, George T. Ohara and Sagar K. Raksit, EE3:June 75:319:11357
Evaluating Economic and Energy Consequences of Land-Use Decisions, Robert S. DeVoy, UP1:Aug 76:105:12331
Evolving National Water Policies, Gary D. Cobb, EI3:July 75:375:11427
Existing and Planned Energy Complexes, Kenneth R. Broome, EFEEC:Aug 75:24

Factoring in Public Participation: Suggestions for Industry, Henry Herrmann, EFEEC:Aug 75:394
Feedlot Wastes to Useful Energy — Fact or Fiction?, Lawrence A. Schmid, EE5:Oct 75:787:11647
Floating Nuclear Plants and Offshore Energy Centers, Thomas J. DiClemente, OE75:June 75:29
Food and Agricultural Policies, Earl O. Heady, Preprint No.2754, Sept 76, 16pp.
Friction Effects on Spatially Varied Open Channel Flows with Increasing Discharge, J. D. Lin, Victor E. Scottron and Hsiang Kuei Soong, WW76:Aug 76:1517
Impact of Energy Complexes on Freshwater Environments, Loren D. Jensen, EFEEC:Aug 75: 235
Inland Site Location in the Northeast with Emphasis on Water Supply Needs, Clarence N. Freeman and John H. Dixon, EFEEC:Aug 75:92
Laboratory Study of Energy Losses at Storm Sewer Junctions, Jan R. Prins and David R. Townsend, IR76:July 76:609
Local and Regional Economic Impacts of Energy Complexes, Courtney Riordan, EFEEC:Aug 75:312
Low-Energy Dual-Mode Transit, David M. Eggleston, Preprint No.2689, Apr 76, 12pp.
The Nuclear Energy Center Impact on Land Use, Frank A. Jenkins, EFEEC:Aug 75:73
Objectives of Conference on Energy Complexes, Alvin S. Goodman, EFEEC:Aug 75:1
Poll Shows Nuclear Plant Construction Favored by Most: Scientists Don't Agree, CE:Sept 75:20
Public Participation and Energy Complexes: An Overview, Benjamin C. Dysart, III, EFEEC:Aug 75:365
Public Participation from a Utility's Viewpoint: Benefits and Problems, Henry W. Cheney, EFEEC: Aug 75:373
Public Participation in the Fuel Cycle: Experiences and Perspectives, Robert E. Olson, EFEEC:Aug 75: 381
Regional and Local Siting Problems with Emphasis on Overall Environmental Impact — Introduction, Charles A. Dewey, Jr., EFEEC:Aug 75:46
The Role of Geotechnical Engineering in Land Use Planning, Ronald C. Hirschfeld, EFEEC:Aug 75:65
Role of Offshore Nuclear Power Plants, Joseph A. Fischer and Harcharan Singh, PO1:July 75:1:11407
Scope of Socio-Economics Considerations, E. J. Schmidt, EFEEC:Aug 75:272
Section VII — Licensing, Peter L. Ames, EFEEC: Aug 75:425
Session III — Water Supply and Cooling, David R. Helwig, EFEEC:Aug 75:412
Session II — Land Use, Charles A. Dewey, Jr., EFEEC:Aug 75:408
Session I — Objectives (Introduction), Jan C. Philips, EFEEC:Aug 75:404
Session V —Ecology, C. Leland Rogers, EFEEC:Aug 75:417
Session VIII — Public Participation, Kenneth F. Rosanski, EFEEC:Aug 75:428
Session VI — Socio-Economic Problems, Conception Tan, EFEEC:Aug 75:421
Solid Waste Management at Energy Complexes, David R. Berg, EFEEC:Aug 75:201
Some Factors Affecting Land Use for Energy Centers, Harry A. Kornberg, EFEEC:Aug 75:48
A State Government View of Energy Complexes, James E. Harrington, EFEEC:Aug 75:59
State Government Views of Licensing Energy Complexes, Sheldon A. Schwartz, EFEEC:Aug 75: 345
Temperature Dynamics in Dimictic Lakes, Heinz Stefan and Dennis E. Ford, HY1:Jan 75:97:11058
Variable Energy Ratio Method for Structural Design, James W. Gorzynski and William A. Thornton, ST4:Apr 75:973:11266
Wastewater Reuse Aspects of Energy Complexes, Stanley J. Dea, EFEEC:Aug 75:171
Water and Electric Power in the Pacific Northwest, Fred A. Limpert, EFEEC:Aug 75:80
Water and Power in the Northeast, Eugene O'Brien, Clarence N. Freeman and John H. Dixon, Preprint No.2688, Apr 76, 22pp.
Water Available for Energy—Upper Colorado River Basin, Dee C. Hansen, WR2:Nov 76:341:12573
Water Conflicts in Western Coal Development, Theodore T. Williams, WR2:Nov 76:327:12562
Water Supply for Energy Complexes in Water-Short Regions, Gilbert G. Stamm and Kenneth O. Kauffman, EFEEC:Aug 75:147

Energy Balance

Transportation for the 1980's and Its Effect on Energy, the Economy and the Environment, James T. Sullivan, Preprint No.2816, Sept 76, 4pp.

Energy Conservation

Energy Conservation in Existing Buildings, Kneeland A. Godfrey, Jr., CE:Sept 75:79
Energy Conservation in Housing Construction, John A. Lepore, Noam Lior and Sidney Shore, Preprint No.2781, Sept 76, 30pp.
Energy Conservation in Transportation, CE:Feb 76: 24
The Energy Crisis/Bicycles/Federal Government, Nina Dougherty Rowe, BP75:Dec 75:19
The Future of Highways From the Mass Transit Viewpoint, E. L. Tennyson, Preprint No.2751, Sept 76, 17pp.
Highly Energy Efficient — Wilton Wastewater Treatment Plant, Douglas A. Wilke and David R. Fuller, CE:May 76:70
Mechanical Dredges, Adolph W. Mohr, DIEE:Jan 76:125
Pedestrianization of the Central City, Harold Lewis Malt, BP75:Dec 75:214
A Survey of Class I Bikeway Pavements, Thomas H. Crawford, R. Gary Hicks, James J. Berryhill and James S. Lai, BP75:Dec 75:278

Energy Consumption

Carpools: How Successful?, Lew Pratsch, CE:Feb 75: 61
Energy Conservation in Existing Buildings, Kneeland A. Godfrey, Jr., CE:Sept 75:79
The Energy Crisis/Bicycles/Federal Government, Nina Dougherty Rowe, BP75:Dec 75:19
Energy Inputs to Irrigation, J. Clair Batty, Safa N. Hamad and Jack Keller, IR4:Dec 75:293:11810

Energy Dissipation

Energy Dissipation on a Rough Slope, Ole Secher Madsen and Stanley M. White, WW1:Feb 76:31: 11904
Estimation of Wave Spreading Factor and Significant Wave Direction, Nai Kuang Liang, OE75:June 75: 1124
Hydraulic Design of Vertical Stilling Wells, Philip H. Burgi, HY7:July 75:801:11451
Inelastic Cyclic Response of Split K-Braced Frames, Movses J. Kaldjian, Preprint No.2788, Sept 76, 15pp.

Energy Dissipators

Predicting Cavitation in Sudden Enlargements, James W. Ball, J. Paul Tullis and Travis Stripling, HY7: July 75:857:11442

Energy Equation

Mean Energy in Gradually Diverging Flow, Alan F. Babb and Jaime Amorocho, HY5:May 76:581: 12097
Open-Channel Flow Equations Revisited, Ben Chie Yen, EM5:Oct 73:979:10073

Energy Gradient

Design of Drip Irrigation Main Lines, I-pai Wu, IR4: Dec 75:265:11803
Evaluation of Friction Slope Models, Joseph R. Reed and Albert J. Wolfkill, WW76:Aug 76:1159

Energy Losses

Conservation of Energy in Buildings, Vance L. Sailor, CO3:Sept 74:295:10795
Laboratory Study of Energy Losses at Storm Sewer Junctions, Jan R. Prins and David R. Townsend, IR76:July 76:609

Quadratic Loss and Scattering of Long Waves, Chiang C. Mei, Philip L-F. Liu and Arthur T. Ippen, WW3:Aug 74:217:10754
Stilling Basin Design for Low Froude Number, Nani G. Bhowmik, HY7:July 75:901:11448

Energy Methods
Automobile Energy Requirements, Eric Hirst, TE4: Nov 74:815:10909

Energy Storage
Optimal Development of Multipurpose Hydro Projects, Phillip R. Hoffman, PO1:July 74:43:10655

Engineering
Brick Masonry Shells, Clayford T. Grimm, ST1:Jan 75:79:11050
Ford and Carter—Their Views on Technology, CE: Oct 76:70
Ford and Carter—Their Views on Technology, CE: Oct 76:70
Interactive Simulation for Water System Dynamics, Neil S. Grigg and Maurice C. Bryson, UP1:May 75: 77:11313
More on "The Existential Pleasures of Engineering," by Samuel C. Florman (Book Review), W. E. Howland, CE:Sept 76:38
New Productivity Improvement Strategies for the Engineering/Construction Industry, Arnold S. Judson, PROD:Aug 76:49
Quantity Instead of Quality: A Sabotage of Engineering and Its Education by "Engineer Shortage" Propaganda?, Milton Alpern, EI4:Oct 76: 457:12501
"The Existential Pleasures of Engineering," by Samuel C. Florman (Book Review), Dan H. Pletta, CE:Apr 76:106

Engineering Costs
Design Lead Time Predictions, Earl Rogers, TE4: Nov 76:737:12569

Engineering Education
ASCE Minority Group Counseling Under Way, Virginia Fairweather, CE:Aug 75:54
Australian Metrication and the Engineer, Carter H. Harrison, Jr., EI2:Apr 76:199:12088
Building a Professionally Qualified Faculty, King S. Luk and Eugene H. Kopp, EI2:Apr 74:105:10466
Canadian University to Launch Building-Engineering Program, Alan D. Russell and Paul P. Fazio, CE: Apr 75:86
Career Growth for the Professional Engineer, Lindon E. Saline, CE:Nov 75:56
Civil Engineering Calculations Using SI Units, R. Ernest Leffel, EI1:Jan 76:99:11875
Civil Engineering Curricula: Well-Rounded or Overweight?, George K. Wadlin, EI2:Apr 76:159: 12083
Civil Engineering: Education and Practice, Emory L. Kemp, EI1:Jan 76:17:11868
College Admissions for Engineering and Technology, Donald G. Dickason, CE:Feb 76:60
Computer Usage and Pricing Alternatives for Consultants, Norman R. Greve, EI2:Apr 75:93: 11237
Computing Education through Program Evaluation, John Y. Campbell, EI2:Apr 75:149:11240
Construction Productivity — How to Improve It, CE: Oct 76:57
A Crtical Review of ASCE's Planning and Policy Process, Thomas C. Kavanagh, EI4:Oct 74:343: 10890
Current Competence: Current Dilemma, Virginia Fairweather, CE:July 75:50
Education and Training in Water Resources Planning, Alvin S. Goodman, WR2:Nov 76:209:12555
Education for Construction, Albert G.H. Dietz and William A. Litle, CO2:June 76:347:12182
Education, Research, and Productivity in Construction, Boyd C. Paulson, Jr., PROD:Aug 76: 187
An Employer's Evaluation of Cooperative Education, Robert W. Richards, EI2:Apr 75:221:11238
Engineering Education: Can It be More Practical?, Robert W. Richards, CE:July 75:60
Engineering Education for Engineering Practice, Cornelius Wandmacher, EI2:Apr 75:227:11250
Engineering Educator-Practitioner Interchange: Challenge, David Novick, EI1:Jan 76:21:11865
Engineers and Computers — Interaction or Reaction, Richard L. Bland, EI2:Apr 75:79:11253
Enlightened Employers' Continuing Education Policies, John P. Klus, Lowell B. Jackson and C. Allen Wortley, EI3:July 75:419:11428
Federal Manpower in Water Resource Engineering, Edward R. Lewandowski, WR2:Nov 76:185:12533
Improving Your Writing, Eugene E. Dallaire, CE:Jan 75:60
Improving Your Writing — Part II, Eugene E. Dallaire, CE:Apr 75:80
Inequities in Minority Engineer Education, Oswald Rendon-Herrero, EI4:Oct 75:499:11666
An Integrated Approach to Structural Engineering Education at the Undergraduate Level, Richard N. White, ST76:Aug 76:1001
Issues and Problems in Urban Planning, Tung Au, EI3:July 75:305:11417
Is Undergraduate Environmental Engineering Education Desirable?, P. Walton Purdom, EE2:Apr 76:329:12039
Kickbacks Versus Professional Ethics, Russel C. Jones, EI3:July 75:357:11420
Land Surveying Research: 1965-1975, John A. Dearinger, SU1:Oct 75:51:11649
Leadership Constraint in Project Preparation, Phillip Z. Kirpich, EI4:Oct 76:417:12503
Learn From Biographies of Early Engineers, Philip L. Alger, CE:Mar 75:90
Local Land Use Workshops Help, Murray I. Mantell, CE:Oct 75:88
The Making of a "Pro"—A Faculty Viewpoint, Dan H. Pletta, EI3:July 74:217:10645
Metrication—SI in America, Cornelius Wandmacher, EI1:Jan 75:25:11073
Motivating Students Towards Professional Thinking, Joseph M. DeSalvo, EI1:Jan 75:47:11081
Motivation of Students Towards Professional Thinking, Milton Alpern, EI3:July 75:413:11435
New Adjustment of North American Datum and Surveyor, John D. Bossler, William E. Stephens, James R. Plasker, Wesley V. Hull and Douglas R. Lee, SU1:Oct 75:115:11657
Past and Future of Contract Administration, Woodrow W. Wilson, CO3:Sept 75:559:11560
Present and Future Directions in Design Education, Roger K. Seals and William J. Wilhelm, EI1:Jan 75: 37:11044
The Professional Engineer Half a Century Hence, Alfred C. Ingersoll, CE:Mar 75:74
Proposed Professional Advancement Recognition (PAR) Program, C. Allen Wortley, EI1:Jan 76:117: 11861
Providing the Profession with Design Programs, Eddie Y.L. Chien and Michael I. Gilmor, EI2:Apr 75:165:11261
Recommendations for Environmental Engineering Education, Wesley O. Pipes, EE2:Apr 74:243:10459
Recruiting, Scholarship and Work Programs Involving Women and Minority Engineering Students at New Mexico State University, John W. Hernandez and Roger M. Zimmerman, Preprint No.2796, Sept 76, 10pp.
Reforming Civil Engineering Education, Robert M. Sykes, CE:July 75:61
Requirements of Professional Practice, David Novick, EI2:Apr 76:193:12086
Responding to Our Members' Educational Needs, Edward W. Timmons, Jr., EI1:Jan 76:41:11869
Simulation of the Stress Computation in Shells, M. Salama and Senol Utku, Preprint No.2737, Sept 76, 32pp.
Social Science Emphasis in Engineering Education, Dan H. Pletta, EI4:Oct 75:509:11664
Survey Program for Civil Works Projects, William A. Angeloni, SU1:Oct 75:121:11662
Technical Information Processing Systems, William F. Bates, EI2:Apr 75:189:11254

Trends in P.E. License Renewal Requirements, Robert D. Reckert, EI4:Oct 75:449:11667
University of Wisconsin: A Success Story in Continuing Engineering Education, CE:Sept 75:101
A Viewpoint for the Traditional Approach to Structural Engineering Education, Donald R. Sherman, 1976
Why A Co-op Program—A Student's Point of View, Douglas J. Marshall, EI2:Apr 75:243:11264

Engineering Geology
Engineering Geologic Data for Land-Use Planning, John D. Rockaway, UP2:Nov 75:117:11681

Engineering Mechanics
Accuracy of Some Numerical Methods for Column Buckling, Paul Seide, EM5:Oct 75:549:11607
Analysis of Activity Networks under Uncertainty, Alfredo H-S. Ang, Jamal Abdelnour and Amal A. Chaker, EM4:Aug 75:373:11514
Analysis of Unilateral Contact Problem, Panagiotos D. Panagiotopoulos, TN: EM5:Oct 76:921:12443
Analytical Solutions for Pretensioned Cable Nets, H. Max Irvine, EM1:Feb 76:43:11908
Application of Optimal Control Theory to Civil Engineering Structures, Jann-Nan Yang, EM6:Dec 75:819:11812
Approximate Method for Nonlinear Random Vibration, Yi-Kwei Wen, EM4:Aug 75:389:11500
Approximation to First Passage Probability, Jann-Nan Yang, EM4:Aug 75:361:11502
Aspects of Dynamic Stability of Structures, Horst H.E. Leipholz, EM2:Apr 75:109:11229
Axisymmetrical Deformation of Bimodulus Orthotropic Circular Cylindrical Shell, Norio Kamiya, EM1:Feb 76:89:11916
Buckling of Axially Loaded Open Shells, Tung H. Yang and Sidney A. Guralnick, EM2:Apr 76:199:12055
Buckling of Cantilever Bars on Elastic Foundations, James T.S. Wang, TN: EM4:Aug 76:731:12286
Buckling of Cylindrical Shells by Wind Pressure, Yung-shih Wang and David P. Billington, EM5:Oct 74:1005:10874
Cantilever Cylindrical Shells Under Assumed Wind Pressures, S. Gopalacharyulu and David J. Johns, EM5:Oct 73:943:10085
Collapse Load Analysis of Frames Considering Axial Forces, M. Z. Cohn and Tariq Rafay, EM4:Aug 74:773:10757
The Computer in Shell Stability Analysis, Bo O. Almroth and James H. Starnes, EM6:Dec 75:873:11811
Concrete Failure Related to Constituent Properties, Rene B. Testa and Norris Stubbs, EM3:June 76:515:12212
Cone Penetration of Granular and Cohesive Soils, Raymond N. Yong and Choong-Kong Chen, EM2:Apr 76:345:12081
Constitutive Equations and Punch-Indentation of Concrete, Andrie C.T. Chen and Wai F. Chen, EM6:Dec 75:889:11809
Constitutive Relations for Concrete, Andrie C.T. Chen and Wai F. Chen, EM4:Aug 75:465:11529
Convective Transport Finite Element Analog, Keith W. Bedford and James A. Liggett, EM6:Dec 75:803:11807
Cross-Flow Response of Piles Due to Ocean Waves, Rimas Vaicaitis, EM1:Feb 76:121:11897
Dense Effluent Dispersion in a Stream, Henry Crew and Robert O. Reid, EM1:Feb 76:77:11915
Development of Finite Element Head Injury Model, Theodore A. Shugar and Michael G. Katona, EM3:June 75:223:11367
Diffusion of Probability Mass and First Passage Probability, Jann-Nan Yang, EM5:Oct 75:639:11654
Discrete Model of Beams on Elastic Foundation, Gregory Szuladzinski, EM6:Dec 75:839:11814
Dual Failure Criterion for Plain Concrete, Han-Chin Wu, EM6:Dec 74:1167:10996
Dynamic Analysis of Footings on Layered Media, Eduardo Kausel, Jose M. Roesset and Gunter Waas, EM5:Oct 75:679:11652
Dynamic Environment Simulation by Pulse Techniques, Sami F. Masri and Frederick B. Safford, EM1:Feb 76:151:11923
Dynamic Response of Cantilevers with Attached Masses, Anthony N. Kounadis, EM5:Oct 75:695:11616
Dynamic Response of Membranes with Finite Elements, Steven E. Benzley and Samuel W. Key, EM3:June 76:447:12217
Dynamic Stiffness Matrices for Viscoelastic Half-Plane Foundations, Anil K. Chopra, P. Chakrabarti and Gautam Dasgupta, EM3:June 76:497:12209
Dynamic Stiffness of Circular Foundations, Eduardo Kausel and Jose M. Roesset, EM6:Dec 75:771:11800
Earthquake Finite Element Analysis of Structure-Foundation Systems, Ashok K. Vaish and Anil K. Chopra, EM6:Dec 74:1101:10990
Effective Modulus of Twisted Wire Cables, George A. Costello and James W. Phillips, EM1:Feb 76:171:11944
Effect of Foundation Stiffness on Track Buckling, Yehia M. El-Aini, EM3:June 76:531:12216
Effect of Separation Angle on Vortex Streets, John E.L. Simmons, EM5:Oct 75:649:11653
End Effects in Long Curved Beam, Bellur S. Ramachandra Rao, S. Gopalacharayulu and N. B. Shukla, EM1:Feb 76:19:11920
Endochronic Constitutive Law for Liquefaction of Sand, Zdenek P. Bazant and Raymond J. Krizek, EM2:Apr 76:225:12036
Endochronic Theory of Inelasticity and Failure of Concrete, Zdenek P. Bazant and Parameshwara D. Bhat, EM4:Aug 76:701:12360
Energy Approach to Inelastic Cable-Structure Analysis, Giulio Maier and Roberto Contro, EM5:Oct 75:531:11614
Evolutionary Spectra of Seismogram by Multifilter, Hiroyuki Kameda, EM6:Dec 75:787:11805
Finite Deflection of Tapered Cantilevers, Gangan Prathap and Tirupathi Kumara Varadan, TN: EM3:June 76:549:12168
Finite Element Analysis of Wave Diffraction by a Crack, Zdenek P. Bazant, John L. Glazik, Jr. and Jan D. Achenbach, EM3:June 76:479:12220
Form Pressure and Relaxation in Formwork, Myron Levitsky, EM3:June 75:267:11379
Generation of Seismic Floor Spectra, Mahendra P. Singh, EM5:Oct 75:593:11651
Hanging Cable as Rotational Vibration Absorber, Ollie L. Vance and James H. Woodward, TN: EM2:Apr 76:377:12017
Inelastic Buckling of Rings with Residual Stresses, Subhash C. Anand and Alvin R. Griffith, EM5:Oct 73:927:10063
Inelastic Stability of Beams under Biaxial Bending, Chesada Kasemset, Fumio Nishino and Seng-Lip Lee, EM5:Oct 74:965:10881
Instability, Ductility, and Size Effect in Strain-Softening Concrete, Zdenek P. Bazant, EM2:Apr 76:331:12042
Iterative Improvement of Finite Element Approximations, Ranbir S. Sandhu, U. Salaam and K. J. Singh, NMG:June 76:1-104
Large-Deflection Spatial Buckling of Thin Walled Beams and Frames, Zdenek P. Bazant and Mahjoub El Nimeiri, EM6:Dec 73:1259:10247
Lateral Stability of Cable Truss, H. Max Irvine and Paul C. Jennings, EM4:Aug 75:403:11519
Least-Weight Frameworks for Loads Across Span, Richard E. McConnel, EM5:Oct 74:885:10872
Levee System Reliability Along a Confluence Reach, Ferenc Szidarovsky, Lucien Duckstein and Istvan Bogardi, EM5:Oct 75:609:11621
Literature Surveys of Cold-Formed Structures, Ken P. Chong, Chmn., Preprint No.2807, Sept 76, 59pp.
Load-Induced Strains in Hardened Cement Paste, Leslie J. Parrott and John M. Illston, EM1:Feb 75:13:11118
Macroapproach for Ribbed and Grid Plate Systems, Hota V.S. GangaRao, Amr Abd Elmeged and Virendra K. Chaudhary, EM1:Feb 75:25:11130
Membrane Solutions for Shells with Edge Constraint, Charles R. Steele, EM3:June 74:497:10605

Method for Random Vibration of Hysteretic Systems, Yi-Kwei Wen, EM2:Apr 76:249:12073
Micromechanics Model for Creep of Anisotropic Clay, Zdenek P. Bazant, I. Kutay Ozaydin and Raymond J. Krizek, EM1:Feb 75:57:11138
Modal Analysis for Impact of Layered Plates, James T. Kubo and Richard B. Nelson, EM1:Feb 75:45:11133
Model of Interactive Buckling of Stiffened Plates, James G.A. Croll, EM5:Oct 75:575:11622
Model Studies of Multicell Curved Box-Girder Bridges, Mohammad Aslam and William G. Godden, EM3:June 75:207:11366
Nonconforming Finite Element Analysis of Shells, Chang-Koon Choi and William C. Schnobrich, EM4:Aug 75:447:11504
Nonlinear Analysis of Unsymmetrically Laminated Plates, Samir A. Zaghloul and John B. Kennedy, EM3:June 75:169:11345
Nonlinear Panel Response to Nonstationary Wind Forces, Rimas Vaicaitis, EM4:Aug 75:333:11486
Numerical Solution of Moderately Thick Plates, Rajabhau S. Deshmukh and Robert R. Archer, EM5:Oct 74:903:10860
Open-Channel Flow Equations Revisited, Ben Chie Yen, EM5:Oct 73:979:10073
Optimal Aseismic Design of Building and Equipment, Shih-Chi Liu, M. R. Dougherty and F. Neghabat, EM3:June 76:395:12208
Optimally Reinforced Axisymmetric Plates, Robert E. Melchers, EM2:Apr 75:143:11258
Optimal Slabs and Grillages of Constrained Geometry, George I.N. Rozvany, Chinappa Gangadharaiah and Robin D. Hill, EM6:Dec 75:755:11797
Out-of-Plane Vibration of Thick Circular Ring, James Kirkhope, EM2:Apr 76:239:12022
Parallel Flow Between Corrugated Plates, Chang-Yi Wang, TN: EM6:Dec 76:1088:12591
Parallel Motion of Corrugated Plates, Chang-Yi Wang, TN: EM2:Apr 76:373:12017
Parametric Resonance of Suspension Roofs in Wind, Haruo Kunieda, EM1:Feb 76:59:11899
Peak Distribution of Random Wave-Current Force, Chi C. Tung, EM5:Oct 74:873:10843
Performance Requirements for Fireproofing Materials, Lawrence G. Seigel, EM3:June 74:489:10598
Post-Buckling of Redundant I-Beams, Scott T. Woolcock and Nicholas S. Trahair, EM2:Apr 76:293:12054
Post-Buckling of Redundant Rectangular Beams, Scott T. Woolcock and Nicholas S. Trahair, EM4:Aug 75:301:11491
Post-Elastic Response of Suspended Cables, H. Max Irvine, EM6:Dec 75:725:11760
Prestressed Strip on Elastic Foundation, George J. Tsamasfyros and Pericles S. Theocaris, TN: EM5:Oct 76:927:12443
Probabilistic Analysis of Elastoplastic Structures, Thomas L. Paez and James T.P. Yao, EM1:Feb 76:105:11914
Probabilistic Analysis of Fiber-Reinforced Concrete, Antoine E. Naaman, Fred Moavenzadeh and Frederick J. McGarry, EM2:Apr 74:397:10491
Radial Dispersion in Ground-Water Flow, Bruce W. Hunt, EM6:Dec 74:1117:10998
Rectangular Finite Element for Field Problems, Bruce W. Golley, EM3:June 76:431:12175
Refined Stress Analysis of Human Aortic Heart Valves, Altay Cataloglu, Phillip L. Gould and Richard E. Clark, EM1:Feb 76:135:11924
Reliability of Prismatic Bars in Tension, Emilio Rosenblueth and Alfredo Careaga, TN: EM3:June 76:563:12168
Rigid Plastic Beam Model for Pipe Whip Analysis, Martin A. Salmon and Vijay K. Verma, EM3:June 76:415:12206
Rigid-Plastic Circular Plates on Elastic Foundation, Dusan Krajcinovic, EM2:Apr 76:213:12046
Saturated Sand as Inelastic Two-Phase Medium, Zdenek P. Bazant and Raymond J. Krizek, EM4:Aug 75:317:11508
Seismic Response of Pipelines on Friction Supports, James C. Anderson and Anand K. Singh, EM2:Apr 76:275:12043
Simplified Theory of Thin Cylindrical Shells, Yung-shih Wang, Peter C.Y. Lee and David P. Billington, EM4:Aug 74:719:10720
Some Characteristics of Mechanical Wedge System, Alexander Samson, TN: EM4:Aug 76:725:12286
Stability of Cantilever Shells under Wind Loads, Prabhu S. Kundurpi, Gopalacharyulu Samavedam and David J. Johns, EM5:Oct 75:517:11612
Stability of Generally Orthotropic Skew Plate, R. S. Srinivasan and S. V. Ramachandran, TN: EM3:June 76:569:12168
Stability of Pressurized Hyperboloidal Shells, Daniel R. Veronda and Victor I. Weingarten, EM5:Oct 75:663:11650
Stability of Shells Attached to An Elastic Core, Victor I. Weingarten and Yuan S. Wang, EM5:Oct 76:839:12492
Statics and Dynamics of Cable Trusses, H. Max Irvine, EM4:Aug 75:429:11506
Statics of Suspended Cables, H. Max Irvine, EM3:June 75:187:11351
Statistical Properties of Wave Force, Chi C. Tung, EM1:Feb 75:1:11116
Steady Stratified Circulation in a Cavity, Der-Liang Young, James A. Liggett and Richard H. Gallagher, EM1:Feb 76:1:11903
Stiffness Matrices for Beam Members Including Warping Torsion Effects, John L. Meek and Peter Swannell, TN: EM1:Feb 76:193:11884
Stresses in GRP Cylinders with Radial Line Load, Fred C. McCormick and Richard T. Hunt, EM4:Aug 75:417:11520
Structural Modeling of Human Head, Sunder H. Advani and Raymond P. Owings, EM3:June 75:257:11386
Synthetic Aggregate From Incinerator Residues, Horace R. Blank, EM1:Feb 76:31:11898
System Identification of Frames under Seismic Loads, Nestor Distefano and B. Pena-Pardo, EM2:Apr 76:313:12047
Tapered Plane Stress Annular Sector Finite Element, Victor A. Pulmano, EM4:Aug 75:349:11498
Thick Plates on Elastic Foundations by Finite Elements, Otto J. Svec, EM3:June 76:461:12215
Time-Dependent Spectral Content of System Response, Ross B. Corotis and Erik H. Vanmarcke, EM5:Oct 75:623:11648
Torsional Flutter of Rectangular Prisms, Yasuharu Nakamura and Taketo Mizota, EM2:Apr 75:125:11226
Torsion and Flexure of Closed Thin-Walled Beams, Ray N. Nitzsche and Robert E. Miller, TN: EM1:Feb 76:189:11884
Transverse Bending of Laminated Anisotropic Plates, Eric Reissner, TN: EM3:June 76:559:12168
Truncation Error Control in Generalized Finite Element Method, Martin J. Wyatt, Gwynne Davies and Cyril Snell, TN: EM4:Aug 76:736:12286
Turbulent Structure near Smooth Boundary, Paul H. Blinco and Daryl B. Simons, EM3:June 75:241:11372
Unsteady Lifts and Wakes of Oscillating Rectangular Prisms, Yasuharu Nakamura and Taketo Mizota, EM6:Dec 75:855:11813
Variational Principles for Finite Element Analysis of Consolidation, Ranbir S. Sandhu, NMG:June 76:1-20
Variation of Tapered Plates by Finite Strip Method, Victor A. Pulmano and Radhey K. Gupta, TN: EM3:June 76:553:12168
Yaw Effects on Galloping Instability, Rudolf Skarecky, EM6:Dec 75:739:11759

Engineering Schools

Engineering Education: Can It be More Practical?, Robert W. Richards, CE:July 75:60
Requirements of Professional Practice, David Novick, EI2:Apr 76:193:12086
Success Model for Minority Engineering Programs, Norman J. Johnson and E. Louis Overstreet, EI1:Jan 75:67:11084

Engineering Services
Engineering Services for Construction, Altaf Hussain, CO3:Sept 74:273:10787

Engineering Societies
Civil Engineers and Unions in Sweden, Robert D. Holtz, CE:Nov 75:53
Engineers Joint Council Takes Stock, Changes Structure of Governing Board, CE:Dec 76:49
Enlightened Employers' Continuing Education Policies, John P. Klus, Lowell B. Jackson and C. Allen Wortley, EI3:July 75:419:11428
The Making of a "Pro"—A Faculty Viewpoint, Dan H. Pletta, EI3:July 74:217:10645
Past and Future of Contract Administration, Woodrow W. Wilson, CO3:Sept 75:559:11560
Professional Development—An Educator's Viewpoint, Alfred C. Ingersoll, EI4:Oct 75:471:11660
Proposed Professional Advancement Recognition (PAR) Program, C. Allen Wortley, EI1:Jan 76:117:11861

Engineers
Career Growth for the Professional Engineer, Lindon E. Saline, CE:Nov 75:56
The Changing Scene, Harold E. Nelson, UP1:Aug 76:3:12307
Engineers and Computers — Interaction or Reaction, Richard L. Bland, EI2:Apr 75:79:11253
Staff Versus Administration Versus Board or the Planning Process Organized for Consensus Instead of Conflict, James Falick, David Burdick and Henry Winkelman, Preprint No.2701, Apr 76, 23pp.
Technical Information Processing Systems, William F. Bates, EI2:Apr 75:189:11254

Engineers Joint Council
Engineers Joint Council Takes Stock, Changes Structure of Governing Board, CE:Dec 76:49

Entrainment
Buoyant Forced-Plumes in Cross Flow, Vincent H. Chu and Michael B. Goldberg, HY9:Sept 74:1203:10805
Effect of Wind Stress on Stratified Deep Lake, Niels-Erik Ottesen Hansen, HY8:Aug 75:1037:11484
Experimental Study of Turbulent Stratified Shearing Flow, Vincent H. Chu and Madanlal R. Vanvari, HY6:June 76:691:12205
Gross Parameter Solutions of Jets and Plumes, Klas Cederwall, HY5:May 75:489:11285
Hydraulics of Surface Buoyant Jet, Frank Engelund, HY9:Sept 76:1315:12409
Interaction of Multiple Jets with Ambient Current, Ralph R. Boericke, HY4:Apr 75:357:11247

Entrance Channels
Effects of Entrance Loss on Harbor Oscillations, Umit Unluata and Chiang C. Mei, WW2:May 75:161:11287

Entrances (Fluid Flow)
Effects of Entrance Loss on Harbor Oscillations, Umit Unluata and Chiang C. Mei, WW2:May 75:161:11287

Entropy
Entropy Model and Intercity Modal Split in the UK, Gerald R. Leake and John R. Underwood, TE2:May 76:215:12110

Envelopes
Cavity Expansion in Sands with Curved Envelopes, Mohsen M. Baligh, GT11:Nov 76:1131:12536

Environmental Effects
Adapting Flood Control Projects for Environmental Compatibility, John M. Tettemer and Harold A. Vance, IR76:July 76:315
Analysis of Urban Transportation Criteria, Thabet Zakaria, TE3:Aug 75:521:11496
Assessment of Environmental Impact on the Aquatic Environment with Limited Field Data, Paul E. Flatt and Charles D.D. Howard, IR76:July 76:435
Civil and Environmental Engineering Aspects of Energy Complexes, Alvin S. Goodman, Editor, EFEEC:Aug 75
Conditional Expected Tsunami Inundation for Hawaii, Wm. Mansfield Adams, WW4:Nov 75:319:11702
Conference Review and Evaluation, David G. Ellingson, EFAN:Dec 74:287
County Leads in Steering Growth, Gloria S. McGregor, CE:July 75:47
Design Forces for Offshore Nuclear Power Plant Construction, Joseph A. Fischer, Ian Watson, Harcharan Singh, T. D. Lu, Surendra K. Saxena, Demetrious Koutsoftas and Lloyd E. Stahl, OE75:June 75:1
Dredging and the National Environmental Policy Act of1969, James H. Bradley, Preprint No.2734, Apr 76, 16pp.
Effect of Building Regulations on Built Environment, Daniel L. Schodek, EI3:July 76:293:12261
Energy Complexes — Conceptual Arrangements, Ralph W. Gunwaldson, EFEEC:Aug 75:19
Engineering Geologic Data for Land-Use Planning, John D. Rockaway, UP2:Nov 75:117:11681
Engineer's Role in Environmental Issues, James L. Van Beveren, EI2:Apr 76:169:12085
Environmental Aspects of Aquatic Plant Control, Thomas R. Bartley and Edward O. Gangstad, IR3:Sept 74:231:10810
Environmental Aspects—Sacramento Bank Protection, Charles S. Mifkovic and Margaret S. Petersen, HY5:May 75:543:11326
Environmental Baseline Study on the Continental Shelf off the New York Bight, Geraldine V. Cox, Preprint No.2655, Apr 76, 20pp.
Environmental Changes from Surface Water Development, George H. Hargreaves, IR76:July 76:298
Environmental Decision-Making and Facilities Siting, Michael S. Baram, EI2:Apr 76:211:12080
Environmental Implications of Increased Agricultural Production in International River Basins, Peter J. Reynolds, IR76:July 76:394
Environmentally Sensitive Construction Procedures, Austin H. Emery, CE:Mar 75:87
Environment — 25 Years Ahead, Ira L. Whitman, CE:Jan 76:52
Evaluating the Constructed Environment; A Comparison of Two Biomedical Research Laboratories, Robert Gutman and Barbara Westergaard, EFAN:Dec 74:14
Evaluating the Quality of Constructed Environments, Rudolf H. Moos and Bernice S. Moos, EFAN:Dec 74:143
Existing and Planned Energy Complexes, Kenneth R. Broome, EFEEC:Aug 75:24
Finite Element Analysis of Piles in Expansive Media, Joram M. Amir and M. Sokolov, GT7:July 76:701:12256
Human Factors in the Constructed Environment, H. McIlvaine Parsons, EFAN:Dec 74:93
Hydraulic and Environmental Effects of Commercial In-Stream Dredging, Paul G. Mayer, DIEE:Jan 76:947
Impact of Energy Complexes on Freshwater Environments, Loren D. Jensen, EFEEC:Aug 75:235
Impact of the Public on Proposed Offshore Oil Terminal and Refinery, John P. King, EFEEC:Aug 75:276
Inland Site Location in the Northeast with Emphasis on Water Supply Needs, Clarence N. Freeman and John H. Dixon, EFEEC:Aug 75:92
Local and Regional Economic Impacts of Energy Complexes, Courtney Riordan, EFEEC:Aug 75:312
Luncheon Remarks at Ocean Engineering III, Robert I. Price, OE75:June 75:1485
Measuring Quality of Constructions with Man as the Measure, Ronald W. Petersen, EFAN:Dec 74:70

Municipal Problems with P.L. 92-500 — Conformance Versus Performance, Arthur F. Vondrick, Preprint No.2645, Apr 76, 15pp.
New Building Measures Needed in Order to Design for People, Calvin W. Taylor, EFAN:Dec 74:47
New Instruments for Studying Ocean Pollution, Willard Bascom, Preprint No.2721, Apr 76, 13pp.
New York Offshore Airport Feasibility Study, Lawrence Lerner, Preprint No.2634, Apr 76, 25pp.
The Nuclear Energy Center Impact on Land Use, Frank A. Jenkins, EFEEC:Aug 75:73
Numerical Analysis of Thermal Crack Propagation in Pavement Overlays, H. S. Chang, Robert L. Lytton and S. H. Carpenter, NMG:June 76:1-526
Objectives of Conference on Energy Complexes, Alvin S. Goodman, EFEEC:Aug 75:1
The Oceans and American Policy, Thomas A. Clingan, Jr., OE75:June 75:1490
OCIMF Marine Terminal Activities, Thomas F. Bell, Preprint No.2654, Apr 76, 25pp.
Optimal Development of Multipurpose Hydro Projects, Phillip R. Hoffman, PO1:July 74:43:10655
Outlet Drainage — An Assessment of Environmental Effects, J. C. Day, R. F. Brady and M. J. Staite, IR76:July 76:445
An Overview of Environmental Effects of Agricultural Drainage in Canada, Frank R. Hore and Robert S. Broughton, IR76:July 76:138
Parking and Zoning, David K. Witheford, UP1:May 75:1:11294
Problems in Performing Environmental Assessments, Kenneth L. Dickson, David W. Kern, William F. Ruska and John Cairns, Jr., HY7:July 75:965:11463
Quantifying Impact of Transportation Systems, William L. Smith, UP1:Mar 74:79:10416
Rationalized Esthetics in Civil Engineering, Clayford T. Grimm, ST9:Sept 75:1813:11546
Regional and Local Siting Problems with Emphasis on Overall Environmental Impact — Introduction, Charles A. Dewey, Jr., EFEEC:Aug 75:46
Regional Impacts from Water Consumption and Heat Disposal in River Basins and Estuaries, Edwin T. Engman, EFEEC:Aug 75:131
Reporter's Summary for Session VI—Summary Session, Cabell Gwathmey, EFAN:Dec 74:292
Research Needs Relative to Environmental Data, Byron H. Willis, HY11:Nov 75:1423:11700
Section VII — Licensing, Peter L. Ames, EFEEC: Aug 75:425
Sediment Flushing after Dredging in Tidal Bays, Klas Cederwall and Torbjorn Svensson, HY7:July 76: 935:12229
Social and Environmental Concerns in Construction, Robert F. Borg, CO1:Mar 76:1:12007
Social and Environmental Costs in Construction, Enno Koehn, CO4:Dec 76:593:12599
State Government Views of Licensing Energy Complexes, Sheldon A. Schwartz, EFEEC:Aug 75: 345
Strategic Approach to Estuarine Environmental Management, David A. Bella, WW1:Feb 75:73: 11109
Subsurface Versus Surface Drainage Water Quality and Environmental Impacts, E. Penkava, IR76:July 76:97
Summary for Session II - Human Factors Affecting the Constructed Environment, Kevin E. Coray and Ronald W. Petersen, EFAN:Dec 74:249
Terrestrial Impact of Energy Complexes, Blaine E. Dinger, EFEEC:Aug 75:219
Three Dimensional Seismic Analysis for a Floating Nuclear Plant Using Finite Element Procedures, Harry W. Johnson, Ashok K. Vaish and Frank L. Porter, Preprint No.2700, Apr 76, 23pp.
Unreliability of Qualifying Active Mechanical Equipment by Testing Only, Ahmed E. Meligi, STN75:Dec 75:II-11
Urban Runoff Pollution Control—State-of-the-Art, Richard Field and John A. Lager, EE1:Feb 75:107: 11129
U.S. Coast Guard's Role in Environmental Protection, William M. Devlin, Preprint No.2725, Apr 76, 10pp.
Using Evapotranspiration Data to Favorably Influence an Irrigated Environment, E. H. Hobbs and K. K. Krogman, IR76:July 76:184
Utility Land Corridors Location Model — Environmental Assessment, Thomas E. Wester and Dennis W. Weeter, Preprint No.2653, Apr 76, 29pp.
Value Engineering Made Mandatory on EPA Projects Over $10,000,000, Harold Tufty, CE:Sept 76:101
Water and Electric Power in the Pacific Northwest, Fred A. Limpert, EFEEC:Aug 75:80
Water Plan Ranking and the Public Interest, Leonard Ortolano, WR1:Apr 76:35:12068
We Created the Problem; Only We Can Solve It!, Jack R. Janney, EI3:July 75:429:11436

Environmental Engineering

Analysis of Regional Waste Treatment Systems, Dennis W. Weeter and James G. Belardi, TN: EE1: Feb 76:233:11883
Atmospheric Reaeration in a River Using Productivity Analysis, George M. Hornberger and Mahlon G. Kelly, EE5:Oct 75:729:11644
Automatic Control of Large-Scale Combined Sewer Systems, John W. Labadie, Neil S. Grigg and Bruce M. Bradford, EE1:Feb 75:27:11115
Biomass Distribution and Kinetics of Baffled Lagoons, James H. Reynolds, Stephen B. Nielson and E. Joe Middlebrooks, EE6:Dec 75:1005:11787
Boundary Layer Separation Concept of Settling Tanks, Yishu Chiu, EE6:Dec 74:1213:11019
Characteristics of Rural Household Wastewater., Robert Siegrist, Michael Witt and William C. Boyle, EE3:June 76:533:12200
Chemical Sludge Dewatering on Sand Beds, John T. Novak and Gail E. Montgomery, EE1:Feb 75:1: 11111
Chlorine Disinfection of Low Temperature Waters, Leroy C. Reid, Jr. and Dale A. Carlson, EE2:Apr 74:339:10443
Clean Air Equals Dirty Water, Donald C. Tillman and Robert C. Horii, EE1:Feb 75:87:11125
Coastal Power Plant Heat Disposal Considerations, Dean M. Golden, EE3:June 75:365:11359
Column Settling Tests for Flocculant Suspensions, Alphonse E. Zanoni and Marshall W. Blomquist, EE3:June 75:309:11356
Control of Gas Flow from Sanitary Landfills, Houshang Esmaili, EE4:Aug 75:555:11525
Decision Criteria in Solid Waste Collection, Ely Anthony Rosales Ouano and Richard J. Frankel, EE3:June 76:645:12173
Design and Operation Model of Activated Sludge, Joseph H. Sherrard and Alonzo W. Lawrence, EE6: Dec 73:773:10220
Design Graphs for Activated Sludge Process, Michael D. Mynhier and C. P.Leslie Grady, Jr., EE5:Oct 75:829:11659
Design of Integrated Approach to Nutrient Removal, David L. Eisenhauer, Ronald B. Sieger and Denny S. Parker, EE1:Feb 76:37:11906
Design of Storm Sewer Networks, Ben Chie Yen and Ahmet Suha Sevuk, EE4:Aug 75:535:11503
Design Optimization for Biological Filter Models, Harold B. Gotaas and William S. Galler, EE6:Dec 73:831:10191
Determining Specific Deposit by Backwash Technique, Kou-ying Hsiung, EE2:Apr 74:353: 10449
Development of Oregon's Hazardous Waste Program, Milan Synak, Patrick H. Wicks and Kenneth H. Spies, EE3:June 75:301:11355
Developments in Backwashing of Granular Filters, John L. Cleasby, Edward W. Stangl and Gary A. Rice, EE5:Oct 75:713:11642
Discounted Cash Flow Analysis to Select Equipment, Richard Briller, EE3:June 76:595:12190
Disease Risks of Occupational Exposure to Sewage, C. Scott Clark, Edward J. Cleary, Gilbert M. Schiff, Clavin C. Linneman, Jr., John P. Phair and Terrence M. Briggs, EE2:Apr 76:375:12038

Dispersion of Pollutants in Automobile Wakes, Dennis D. Lane and James J. Stukel, EE3:June 76: 571:12189
Distributions of BOD and DO in Rivers and Lakes, Robert B. Banks, EE2:Apr 76:265:12028
DO-Sag in Oscillating Flow, Wen-Hsiung Li and Michael Edwin Kozlowski, EE4:Aug 74:837:10713
Dredging and the National Environmental Policy Act of1969, James H. Bradley, Preprint No.2734, Apr 76, 16pp.
Dynamic Response of Settling Basins, Sadataka Shiba and Yoriteru Inoue, EE5:Oct 75:741:11609
Ecology of Blue-Green Algal Viruses, Robert E. Cannon, Miriam S. Shane and Eugene DeMichele, EE6:Dec 74:1205:11012
Effect of Media Intermixing on Dual Media Filtration, John L. Cleasby and Gary D. Sejkora, EE4:Aug 75:503:11528
Effects of Deposit Resuspension on Settling Basin, Takeichiro Takamatsu, Masaaki Naito, Sadataka Shiba and Yasuyo Ueda, EE4:Aug 74:883:10705
Effects of Shock Temperature on Biological Systems, John L. Carter and William F. Barry, EE2:Apr 75: 229:11239
Effluent Irrigation of Pearl Millet, Allen R. Overman, EE2:Apr 75:193:11233
Effluent Irrigation of Rye and Ryegrass, Allen R. Overman and Hsiao-Ching Ku, EE2:Apr 76:475: 12035
Energy Recovery from Refuse—State-of-the- Art, John Payne, EE2:Apr 76:281:12027
Energy-Wastewater Treatment and Solids Disposal, William F. Garber, George T. Ohara and Sagar K. Raksit, EE3:June 75:319:11357
Environmental Design for Istanbul Sewage Disposal, Charles G. Gunnerson, EE1:Feb 74:101:10343
Environmental Health Impact Assessment, Samuel C. Morris and E. W. Novak, EE3:June 76:549:12192
Environmental Systems at Walt Disney World, Arthur C. Bravo, EE6:Dec 75:887:11755
Equalization of Time Variable Waste Loads, Vladimir Novotny and Robert M. Stein, EE3:June 76:613: 12191
Equivalent Pipe Methods for Optimizing Water Networks--Facts and Fallacies, Pramod K. Swamee and P. Khanna, EE1:Feb 74:93:10375
Estimated Indirect Cost of Urban Water Use, Charles H. Lawrance, EE4:Aug 75:517:11482
Evaluation of Environmental Impact of Landfills, Patrick Caffrey, Martin David and Robert K. Ham, EE1:Feb 75:55:11119
Evaluation Strategies of Metal Pollution in Oceans, Kenneth Y. Chen and R. Addis Lockwood, EE2: Apr 76:347:12023
Extended Plain Sedimentation, Kuan M. Yao, EE3: June 75:413:11392
Fate of Metals in Wastewater Discharge to Ocean, Naresh K. Rohatgi and Kenneth Y. Chen, EE3: June 76:675:12194
Fate of Wastewater Bacteria and Viruses in Soil, Charles P. Gerba, Craig Wallis and Joseph L. Melnick, IR3:Sept 75:157:11572
Feedlot Wastes to Useful Energy — Fact or Fiction?, Lawrence A. Schmid, EE5:Oct 75:787:11647
Future of Sanitary Landfill, Bruce Thompson and Iraj Zandi, EE1:Feb 75:41:11113
High-Rate Water Treatment: The State-of-the-Art, Paul H. King, Robert L. Johnson, Clifford W. Randall and Glenn W. Rehberger, EE4:Aug 75:479: 11531
Improved Fish Protection at Intake Systems, Victor J. Schuler and Lory E. Larson, EE6:Dec 75:897: 11756
Infiltration-Inflow Analysis, David J. Cesareo and Richard Field, EE5:Oct 75:775:11645
Influence of Activated Sludge CRT on Adsorption, Byung R. Kim, Vernon L. Snoeyink and F. Michael Saunders, EE1:Feb 76:55:11937
Is Undergraduate Environmental Engineering Education Desirable?, P. Walton Purdom, EE2:Apr 76:329:12039
Kingwood: A Non-Assisted Private Suburban Development, Daniel B. Stauffer, Preprint No.2656, Apr 76, 26pp.
Laboratory Evaluation of Polymeric Flocculants, Andrew Benedek and John J. Bancsi, EE1:Feb 76: 17:11887
Land-Use Model for Service Area Projection, Peter M. Meier, EE1:Feb 76:71:11932
Large-Scale Estuarine Water Quality Matrix Model, Bhaskara R. Penumalli, Robert H. Flake and E. Gus Fruh, EE1:Feb 76:191:11946
Least Cost Design of Branched Pipe Network System, Arun K. Deb, EE4:Aug 74:821:10711
Lime Recovery and Reuse in Primary Treatment, Denny S. Parker, Geoffrey A. Carthew and Gerry A. Horstkotte, EE6:Dec 75:985:11789
Limestone Barriers to Neutralize Acidic Streams, Frank H. Pearson and Archie J. McDonnell, EE3: June 75:425:11382
Longitudinal Dispersion Coefficients for Streams, Subhash C. Jain, EE2:Apr 76:465:12037
Makeup Requirements for Cooling Ponds, John C. Sonnichsen, Jr., EE1:Feb 75:15:11114
Management of Waste Fluids in Salaquifers, Raphael G. Kazmann, Oscar K. Kimbler and Walter R. Whitehead, IR4:Dec 74:413:10991
Measured Versus Predicted Air Quality Near Highways, Terry L. Miller and Kenneth E. Noll, EE3:June 76:627:12195
Minimum Cost in Residential Refuse Vehicle Routes, Jon C. Liebman, James W. Male and Magne Wathne, EE3:June 75:399:11368
Modeling Sewage Treatment Plant Input BOD Data, Paul M. Berthouex, William G. Hunter, Lars C. Pallesen and Chun-Yen Shih, EE1:Feb 75:127: 11132
Models for Evaluation of Hazardous Wastes, Albert J. Klee, EE1:Feb 76:111:11940
Nitrifying Organism Concentration and Activity, Embar G. Srinath, Raymond C. Loehr and Tata B.S. Prakasam, EE2:Apr 76:449:12041
NO_x Emissions from Stationary Combustion Sources, James J. Stukel, Chmn., EE3:June 74:641:10581
Nutrient Transformations in Mass Cultures of Marine Algae , Joel C. Goldman and John H. Ryther, EE3: June 75:351:11358
Optimal Activated Sludge Design under Uncertainty, Arthur R. Tarrer, C. P. Leslie Grady, Jr., Henry C. Lim and Lowell B. Koppel, EE3:June 76:657:12207
Optimal Control of Nitrogen Losses from Land Disposal Areas, Douglas A. Haith, EE6:Dec 73: 923:10200
Optimal Risk-Based Design of Storm Sewer Networks, Wilson H. Tang, Larry W. Mays and Ben Chie Yen, EE3:June 75:381:11360
Optimization of Denitrification Process, Richard P. Michael and William J. Jewell, EE4:Aug 75:643: 11532
Optimization of Evaporation Pond Cost, Subhash C. Mehrotra, EE1:Feb 76:165:11942
Optimization of Urban Air Monitoring Networks, William P. Darby, Paul J. Ossenbruggen and Constantine J. Gregory, EE3:June 74:577:10577
Optimization of Water Distribution Network Systems, Arun K. Deb, EE4:Aug 76:837:12343
Optimizing Flocculator Power Input, Rafael Andreu-Villegas and Raymond D. Letterman, EE2:Apr 76: 251:12032
Oxygen Depletion Model for Cayuga Lake, J. Denis Newbold and James A. Liggett, EE1:Feb 74:41: 10346
Oxygen Transfer at High Solids Concentrations, Dale R. Baker, Raymond C. Loehr and Arthur C. Anthonisen, EE5:Oct 75:759:11641
Particles, Polymers, and Performance in Filtration, Mohammad T. Habibian and Charles R. O'Melia, EE4:Aug 75:567:11512
Performance of Single Household Treatment Units, Richard J. Otis and William C. Boyle, EE1:Feb 76: 175:11895
Persistence of Virus on Sewage-Irrigated Vegetables, Edward P. Larkin, John T. Tierney and Robert Sullivan, EE1:Feb 76:29:11935
Philadelphia Pilots--Builds Oxygen Activated Sludge, Carmen F. Guarino, Michael D. Nelson and Allan B. Edwards, EE4:Aug 74:919:10722

Phosphate Release and Sorption by Lake Mohegan Sediments, John Fillos and Hiranmay Biswas, EE2: Apr 76:239:12029
Phosphorus Model of Muskegon Wastewater System, Carl G. Enfield and Lowell E. Leach, EE6:Dec 75: 911:11775
Physicochemical Approach to Water and Wastewater Filtration, Mriganka M. Ghosh, Thomas A. Jordan and Ronald L. Porter, EE1:Feb 75:71:11120
Planning and Control of Combined Sewerage Systems, William R. Giessner, Robert T. Cockburn, Frank H. Moss, Jr. and Mark E. Noonan, EE4:Aug 74:1013:10744
Pollutional Analysis of Combined Sewer Systems, Oddvar Georg Lindholm, EE2:Apr 76:301:12030
Population Balance Use in Dilute Impurity Problems, John D. Stevens and Paul M. Schierholz, EE2:Apr 76:337:12034
Practical Refuse Recycling, C. Edward Walter, EE1: Feb 76:139:11941
Pyrolysis as Means of Sewages Sludge Disposal, Nancy E. Folks, R. Addis Lockwood, Bert A. Eichenberger, Frank R. Bowerman and Kenneth Y. Chen, EE4:Aug 75:607:11518
Reclamation of Wood-Chip Carrier Water, Joe M. Shane, Neil S. Hawthorne and Takashi Asano, EE2:Apr 75:215:11231
Recommendations for Environmental Engineering Education, Wesley O. Pipes, EE2:Apr 74:243:10459
Reservoir Project Environmental Study, Merwin D. Dougal and Kenneth L. Dueker, HY9:Sept 75:1257: 11578
Risk-Safety Factor Relation for Storm Sewer Design, Ben Chie Yen and Wilson H. Tang, TN: EE2:Apr 76:509:12016
Role of Eddy Diffusivity in Thermocline Formation, Brian Henderson-Sellers, EE3:June 76:517:12174
Sanitary Landfill Leachates and Their Leachate Treatment, Edward S.K. Chian and Poppe B. DeWalle, EE2:Apr 76:411:12033
Segmented Population Model of Primary Productivity, Guenton C. Slawson, Jr. and Lorne G. Everett, EE1:Feb 76:127:11945
Septic Tank Efficiency, Thiruvenkatachari Viraraghavan, TN: EE2:Apr 76:505:12016
Settlement of Building on Pile Foundation in Sand, Robert M. Koerner and Antal Partos, GT3:Mar 74: 265:10405
Sewage Chlorination Versus Toxicity -- A Dilemma?, Harvey F. Collins and David G. Deaner, EE6:Dec 73:761:10190
Sewer Line Design Based on Critical Shear Stress, Kuan M. Yao, EE2:Apr 74:507:10480
Simple Method for Predicting Dispersion in Streams, Raul S. McQuivey and Thomas N. Keefer, EE4: Aug 74:997:10708
Simplified Optimization of Water Supply System, Hans Jorgen Rasmusen, EE2:Apr 76:313:12026
Simulation of Water Quality in Tarawera River, J. Christopher Rutherford and Michael J. O'Sullivan, EE2:Apr 74:369:10461
Simulation of Water Quality Management Policies, John W. Hyden, James A. Chisman and Hugh H. Macaulay, EE4:Aug 75:623:11524
Site Evaluation and Design of Seepage Fields, Kent A. Healy and Rein Laak, EE5:Oct 74:1133:10882
Slime Holdup, Influent BOD, and Mass Transfer in Trickling Filters, Bernard Atkinson and John A. Howell, EE4:Aug 75:585:11505
Solution for Radial-Flow with Nonlinear Adsorption, Surendra P. Gupta and Robert A. Greenkorn, EE1: Feb 76:87:11901
Some Features of Wind Action on Shallow Lakes, Robert B. Banks, EE5:Oct 75:813:11640
Statistical Design of Equalization Basins, Dominic M. Di Toro, EE6:Dec 75:917:11782
Statistical Evaluation of Reaeration Prediction Equations, Linfield C. Brown, EE5:Oct 74:1051: 10849
Statistical Study of Phosphorus Removal in Wisconsin, Martin H. David, Frederick J. Schroeder, J. Jeffrey Peirce, Erhard F. Joeres and Daryl A. Braasch, EE2:Apr 76:433:12045
Steady-State Water Quality Modeling in Streams, Robert Willis, Donald R. Anderson and John A. Dracup, EE2:Apr 75:245:11246
Stochastic Analysis of Trickling Filter, Khurshed J. Mistry and David M. Himmelblau, EE3:June 75: 333:11362
Systems Analysis and Solid Waste Planning, Robert M. Clark and James I. Gillean, EE1:Feb 74:7:10316
Temperature Effects on Aerobic Digestion Kinetics, Clifford W. Randall, James B. Richards and Paul H. King, EE5:Oct 75:795:11646
Transient Hydrothermal Analysis of Small Lakes, Lawrence A. Loziuk, James C. Anderson and Ted B. Belytschko, PO2:Nov 73:349:10150
Transport Phenomena Applied to Sludge Dewatering, Peter Kos and Donald Dean Adrian, EE6:Dec 75: 947:11781
Unsaturated Flow During Soil Treatment of Septic Tank Effluent, Johannes Bouma, EE6:Dec 75:967: 11783
Upflow Filter for Potable Water Production, Ben J. Haney and Stephen E. Steimle, EE4:Aug 75:489: 11511
Urban Runoff Pollution Control—State-of-the-Art, Richard Field and John A. Lager, EE1:Feb 75:107: 11129
Use of Crushed Limestone to Neutralize Acid Wastes, Frank H. Pearson and Archie J. McDonnell, EE1:Feb 75:139:11131
Use of Jet Pumps in Marine Waste Disposal, Yerachmiel Argaman, Michael Vajda and Noah Galil, EE5:Oct 75:703:11639
Volume of Storm Water Retention Basins, Chester J. Ordon, EE5:Oct 74:1165:10889
Waste Generation Models for Solid Waste Collection, Donald Grossman, James F. Hudson and David H. Marks, EE6:Dec 74:1219:11022
Wasterwater Reclamation and Recharge, Bay Park, N.Y., John Vecchioli, James A. Oliva, Stephen E. Ragone and Henry F.H. Ku, EE2:Apr 75:201:11232
Water Quality Effects of a Dredging Disposal Area, Raymond J. Krizek, Brian J. Gallagher and Gabor M. Karadi, EE2:Apr 76:389:12040
Water Quality Management for Metropolitan Kansas City, O. John Schmidt, EE6:Dec 75:935:11784
Water Quality Models Using the Box-Jenkins Method, Peter M. Huck and Grahame J. Farquhar, EE3:June 74:733:10629
Water Reclamation: Technology and Public Acceptance, Ralph Stone, EE3:June 76:581:12193
Water to Air Bacterial Transfer by Bursting Bubbles, D. Wozniak, M. Kiwak, C. Cahoon and Robert H. Edgerton, EE3:June 76:567:12197

Environmental Factors

Adapting Flood Control Projects for Environmental Compatibility, John M. Tettemer and Harold A. Vance, IR76:July 76:315
Assessment of Environmental Impact on the Aquatic Environment with Limited Field Data, Paul E. Flatt and Charles D.D. Howard, IR76:July 76:435
Bicycle Facility Design Considerations: A Summary, John E. Baerwald, BP75:Dec 75:259
Bioassessment of the Standard Elutriate Test, Peter J. Shuba, Joe H. Carroll and Henry E. Tatem, DIEE: Jan 76:645
Concrete in Water Resource and Energy Development, Harold G. Arthur, Preprint No.2741, Sept 76, 30pp.
The Constructed Environment with Man as the Measure as Part of the Quality System in Construction, Cabell Gwathmey, Chmn., EFAN: Nov 74
Design Considerations in Long Span Steel Bridges, Chris S.C. Yiu and Man-Chung Tang, Preprint No.2785, Sept 76, 30pp.
Determining Needs and Benefits of an Island Port Project Under U.S. Army Corps of Engineers Regulations, Jimmy B. Allen, WW76:Aug 76:316
Development of the Continental Shelf, William S. Gaither, Preprint No.2813, Sept 76, 9pp.
Development of the Water Resources in the Tennessee Valley Region, Bevan W. Brown, Jr., Preprint No.2799, Sept 76, 22pp.

Economic Impact of Dredging Regulations, Frank C. Boerger and Michael H. Cheney, DIEE:Jan 76:408
Environmental Changes from Surface Water Development, George H. Hargreaves, IR76:July 76: 298
Environmental Costs — Impact on Dredging, Carl C. Cable and William R. Pearson, DIEE:Jan 76:353
Environmental Impact Reports: Problems and Opportunities, Robert L. Jones, CE:May 75:71
Environmental Implications of Increased Agricultural Production in International River Basins, Peter J. Reynolds, IR76:July 76:394
Evolution of 208 Water-Quality Planning, Leon G. Billings, CE:Nov 76:54
First Steps Toward Achieving Disposal Area Reuse, Raymond L. Montgomery and Michael R. Palermo, DIEE:Jan 76:529
Habitat Development on Dredged Material, Hanley K. Smith, DIEE:Jan 76:856
Historic Preservation and the Role of the Civil Engineer, Ernest Allen Connally, Preprint No.2744, Sept 76, 11pp.
Impact of Air Quality on Bicyclists, Eugene E. Burr and Terry L. Miller, BP75:Dec 75:571
Integrating Environmental Factors Into Water Planning: An Historical Perspective, Leonard Ortolano, Preprint No.2754, Sept 76, 20pp.
The Miami Conservancy District — A Study in Self Help, L. Bennett Coy, Preprint No.2747, Sept 76, 11pp.
Modern Trends in Dredge Design, Thomas M. Turner, DIEE:Jan 76:173
National Environmental Policies and the Effect on Productivity Through Regulation, Norman E. Hill, PROD:Aug 76:277
Offshore Platform Reliability — A Parameter Study, Bernhard Stahl and K. A. Blenkarn, ST76:Aug 76: 419
An Overview of Environmental Effects of Agricultural Drainage in Canada, Frank R. Hore and Robert S. Broughton, IR76:July 76:138
Pedestrianization of the Central City, Harold Lewis Malt, BP75:Dec 75:214
Planning Pedestrian Environments — A Computer Simulation Model, William Boles, BP75:Dec 75:224
A Potential Irrigation-Conservation Program for 300,000 Acres in Northern Maine, Robert G. Hunt, Preprint No.2762, Sept 76, 23pp.
Productivity and the Construction Grants Program for Wastewater Treatment Works: An EPA View, Harold P. Cahill, Jr., PROD:Aug 76:205
Project Formulation: Economic and Financial Aspects, Gary D. Cobb, IR76:July 76:660
Project Formulation in Today's World — Legislative and Regulatory Aspects, Daniel A. Dreyfus, IR76: July 76:626
Project Formulation in Today's World — The New Dimensions of Legislative and Regulatory Aspects, Reginald E. Bailey, IR76:July 76:632
Quarantine Island Disposal Plan, George Marsch, DIEE:Jan 76:579
Role of Offshore Nuclear Power Plants, Joseph A. Fischer and Harcharan Singh, PO1:July 75:1:11407
Sediment-Water Interaction during Dredging Operations, John F. Sustar, Thomas H. Wakeman and Richard M. Ecker, DIEE:Jan 76:736
Soil-Plant Relationships in Dredged Material Marshes with Particular Reference to Heavy Metal and Nutrient Availability, J. S. Boyce, DIEE:Jan 76:496
A Study of the Effects of Maintenance Dredging on Selected Ecological Parameters in the Gulfport Ship Channel, Gulfport, Mississippi, Joseph W. Markey and Hugh D. Putnam, DIEE:Jan 76:821
A Study to Predict the Release of Metals from Hydraulically Dredged Material, William R. Gee, Robert W. George, John P. Hewitt and Kenneth B. Kim, WW76:Aug 76:492
Subsurface Versus Surface Drainage Water Quality and Environmental Impacts, E. Penkava, IR76:July 76:97
Transportation for the 1980's and Its Effect on Energy, the Economy and the Environment, James T. Sullivan, Preprint No.2816, Sept 76, 4pp.
Using Evapotranspiration Data to Favorably Influence an Irrigated Environment, E. H. Hobbs and K. K. Krogman, IR76:July 76:184
208: A Process for Water Quality Management, Mark A. Pisano, CE:Nov 76:55

Environmental Impact Statements

Adapting Flood Control Projects for Environmental Compatibility, John M. Tettemer and Harold A. Vance, IR76:July 76:315
Assessment of Environmental Impact on the Aquatic Environment with Limited Field Data, Paul E. Flatt and Charles D.D. Howard, IR76:July 76:435
Civil Engineering Esthetics—State-of-the-Art, Clayford T. Grimm and Wolfgang F.E. Preiser, ST8:Aug 76:1531:12322
Coastal Power Plant Heat Disposal Considerations, Dean M. Golden, EE3:June 75:365:11359
Community Role in Modal Choice for Transit System Planning, Robert E. Paaswell and Janice Pafka-Gerbig, UP1:May 75:35:11305
Construction Economy: What Price Environmental Controls?, Harlan W. Fair, CO3:Sept 76:521:12427
Delphic Predictions and Cross Impact Simulation, Jarir S. Dajani and Gorman Gilbert, UP1:May 75: 49:11316
Dredged Material as a Natural Resource, Michael R. Walsh, Preprint No.2714, Apr 76, 19pp.
Economic Impact of Dredging Regulations, Frank C. Boerger and Michael H. Cheney, DIEE:Jan 76:408
Engineering Surveying: Chapters 2, 5, 6, 8, 16, and 20, George M. Mayfield, Chmn., SU1:Dec 76:59: 12648
Engineer's Role in Environmental Issues, James L. Van Beveren, EI2:Apr 76:169:12085
Environmental Costs — Impact on Dredging, Carl C. Cable and William R. Pearson, DIEE:Jan 76:353
Environmental Health Impact Assessment, Samuel C. Morris and E. W. Novak, EE3:June 76:549:12192
Environmental Impact Reports: Problems and Opportunities, Robert L. Jones, CE:May 75:71
Environmental Impact Statements and Civil Engineering, Martin P. Waniclista, Waldron M. McLellon and Lawrence L. Smith, EI3:July 75:321: 11418
Environmentally Sensitive Construction Procedures, Austin H. Emery, CE:Mar 75:87
Evaluating the Constructed Environment; A Comparison of Two Biomedical Research Laboratories, Robert Gutman and Barbara Westergaard, EFAN:Dec 74:14
Greater Lawrence Transportation Improvements Study, Maurice Freedman, Preprint No.2763, Sept 76, 30pp.
Highway and Sewer Impacts on Urban Development, Frank T. Rabe and James F. Hudson, UP2:Nov 75: 217:11728
Impact Assessment of Power Plants, D. Joseph Hagerty and John E. Heer, PO1:Jan 76:81:11823
Impact of the Public on Proposed Offshore Oil Terminal and Refinery, John P. King, EFEEC:Aug 75:276
Interactive Simulation for Water System Dynamics, Neil S. Grigg and Maurice C. Bryson, UP1:May 75: 77:11313
Issues and Problems in Urban Planning, Tung Au, EI3:July 75:305:11417
I-70 Glenwood Canyon — Design Concept, Joseph H. Looper, TE2:May 76:201:12138
Let's Consider Land Treatment, Not Land Disposal, Ants Uiga, Alfred T. Wallace and David H. Howells, CE:Mar 76:60
Luncheon Remarks at Ocean Engineering III, Robert I. Price, OE75:June 75:1485
Marine Ecological Impacts Associated with Power Plant Activities, B. J. Copeland and Frank N. Moseley, EFEEC:Aug 75:250
Methodology of Construction Industry Profiling: A Case History, Mark H. Jordan, EI1:Jan 76:67: 11864
Municipal Problems with P.L. 92-500 — Conformance Versus Performance, Arthur F. Vondrick, Preprint No.2645, Apr 76, 15pp.

National Environmental Policies and the Effect on Productivity Through Regulation, Norman E. Hill, PROD:Aug 76:277
New York Offshore Airport Feasibility Study, Lawrence Lerner, Preprint No.2634, Apr 76, 25pp.
Nuclear Power Plant Cooling System Selection, Stephen C. Ko, PO1:July 75:55:11405
OTA: Mixing Technology and National Goals, Emilio Q. Daddario, CE:Dec 75:78
Pipeline Corridor Selection Model Concept, Francis J. Stastny, TE2:May 75:337:11330
Problems in Performing Environmental Assessments, Kenneth L. Dickson, David W. Kern, William F. Ruska and John Cairns, Jr., HY7:July 75:965:11463
Regional and Local Siting Problems with Emphasis on Overall Environmental Impact — Introduction, Charles A. Dewey, Jr., EFEEC:Aug 75:46
Regional Impacts from Water Consumption and Heat Disposal in River Basins and Estuaries, Edwin T. Engman, EFEEC:Aug 75:131
Return of Fines from Commercial Dredging to the Ohio River, James C. North and John Clark, DIEE:Jan 76:593
Role of Offshore Nuclear Power Plants, Joseph A. Fischer and Harcharan Singh, PO1:July 75:1:11407
San Antonio Ranch Case Study— National Environmental Policy Act, Robert G. Honts, UP2: Nov 75:127:11683
Scope of Socio-Economics Considerations, E. J. Schmidt, EFEEC:Aug 75:272
Section VII — Licensing, Peter L. Ames, EFEEC: Aug 75:425
Session II — Land Use, Charles A. Dewey, Jr., EFEEC:Aug 75:408
Statistical Design Basis for Submerged Diffuser, Thomas E. Pease and Michael J. Skelly, PO1:July 75:11:11408
Strategies for Alleviating Impact of Aircraft Noise, Adib Kanafani and Abdullah Mogharabi, TE4:Nov 75:657:11715
A Study to Predict the Release of Metals from Hydraulically Dredged Material, William R. Gee, Robert W. George, John P. Hewitt and Kenneth B. Kim, WW76:Aug 76:492
Urban Freeways and Changing Social Values, Kneeland A. Godfrey, Jr., CE:May 75:80
Use of an EIR Process in Controlling Urban Sprawl, Randolph M. Brodersen and Leonard Ortolano, UP1:Aug 76:199:12358
Utility Land Corridors Location Model — Environmental Assessment, Thomas E. Wester and Dennis W. Weeter, Preprint No.2653, Apr 76, 29pp.
Water Plan Ranking and the Public Interest, Leonard Ortolano, WR1:Apr 76:35:12068

Environmental Planning

The Dallas/Fort Worth Airport Project, Raymond J. Hodge, Preprint No.2703, Apr 76, 10pp.
Today's Northwest Passage, Richard A. Kaden and Roney A. Heinz, CE:June 76:41

Environmental Quality

Ecological Considerations in Transportation Systems, Beatrice E. Willard, EI3:July 75:329:11454
Environmental Data Management, George K. Young and G. F. Tierney, WR2:Nov 76:255:12559
Environmental Values and Water Quality Planning, Peter Richerson and Robert Johnston, HY2:Feb 75: 259:11136
Parking and Zoning, David K. Witheford, UP1:May 75:1:11294
Social and Environmental Concerns in Construction, Robert F. Borg, CO1:Mar 76:1:12007

Environmental Quality Regulations

County Leads in Steering Growth, Gloria S. McGregor, CE:July 75:47

Environmental Surveys

Environmental Baseline Study on the Continental Shelf off the New York Bight, Geraldine V. Cox, Preprint No.2655, Apr 76, 20pp.

Environments

Masjid (Mosque) Planning, Altaf Hussain, UP1:Aug 76:171:12348
Winners of 1975 Highway Environment Awards; Competition Open for '76, CE:June 76:12

Ephemeral Streams

Dynamic Behavior Model of Ephemeral Stream, Kenneth G. Renard and Emmett M. Laursen, HY5: May 75:511:11315

Epidemiology

Disease Risks of Occupational Exposure to Sewage, C. Scott Clark, Edward J. Cleary, Gilbert M. Schiff, Clavin C. Linneman, Jr., John P. Phair and Terrence M. Briggs, EE2:Apr 76:375:12038

Epoxy Compounds

Epoxy-Repaired Bolted Timber Connections, R. Richard Avent, Leroy Z. Emkin, Robert H. Howard and Charles L. Chapman, ST4:Apr 76:821: 12061
Structural Design of Large Space Telescope, Gerald W. Arnts, Jr., TE2:May 76:363:12132

Epoxy Resins

Epoxy-Repaired Bolted Timber Connections, R. Richard Avent, Leroy Z. Emkin, Robert H. Howard and Charles L. Chapman, ST4:Apr 76:821: 12061
Proven Organic Coatings for Long Term Protection, Abel Banov, CE:Dec 75:54
Proven Organic Coatings for Long Term Protection — Part II, Abel Banov, CE:Feb 76:64
Repair of Earthquake Damaged Underground Reservoir, Daniel J. Smith, Jr., CO3:Sept 74:449: 10825
Stresses in Concrete Around Spiral Case, Prem S. Nigam, Om P. Jain and Madhu B. Kanchi, PO1:Jan 76:95:11845
Three-Dimensional Analysis of Hydroelectric Power Station, Prem S. Nigam, Om P. Jain and Mahesh B. Kanchi, PO1:Jan 76:35:11830
Ventura City Hall Restoration, James Warner, CO1: Mar 76:119:11970

Equalizing

Equalization of Flow Variations in Combined Sewers, Lars-Eric Janson, Stein Bendixen and Anders Harlaut, EE6:Dec 76:1139:12596
Equalization of Time Variable Waste Loads, Vladimir Novotny and Robert M. Stein, EE3:June 76:613: 12191

Equalizing Reservoirs

Statistical Design of Equalization Basins, Dominic M. Di Toro, EE6:Dec 75:917:11782

Equations

Quadratic Finite Elements in Shallow Water Problems, Paul W. Partridge and Carlos A. Brebbia, HY9:Sept 76:1299:12418
Special Problems Related to Linear Equation Solvers, Christian Meyer, ST4:Apr 75:867:11223

Equations of Motion

Determination of the Natural Modes of a Complex Elastic Structure in Terms of the Natural Modes of the Unconstrained Components, Jay S. Abramowitz, ST76:Aug 76:689
Integration of Linear Equations of Motion, Robert J. Melosh, ST7:July 75:1551:11444

Equilibrium

Iterative Schemes for Slope Stability Analysis, Antonio Soriano, NMG:June 76:II-713
Structural Optimization by Equilibrium Linear Programming, Kenneth F. Reinschmidt and Thanet Norabhoompipat, ST4:Apr 75:919:11219

Equilibrium Equations

On the Accuracy of the Solution of Finite Element Equilibrium Equations, Klaus-Jurgen Bathe, NMG: June 76:I-82

Equipment
Generation of Seismic Floor Spectra, Mahendra P. Singh, EM5:Oct 75:593:11651

Erection
Computer Analysis of Segmentally Erected Bridges, Robert C. Brown, Jr. and Ned H. Burns, ST4:Apr 75:761:11218
Fifty-Year Development — Construction of Steel Pipeline Suspension Bridges, John F. Cain, CO4: Dec 75:733:11768
Fifty-Year Development Construction of Steel Girder Bridges, Edward A. Burroughs, CO3:Sept 75:463:11549

Ernest E. Howard Award
1976 Ernest E. Howard Award Presented to Egor Paul Popov, CE:Oct 76:97

Erosion
Analytical Prediction of Shoreline Erosion, John S. Fisher, Leif F. Gulbrandsen and Victor M. Goldsmith, OE75:June 75:161
Assessment of Galveston Entrance Movable-Bed Model, William H. McAnnaly, Jr. and Joseph V. Letter, Jr., Preprint No.2661, Apr 76, 27pp.
Coastal Engineering—State-of-the-Art Summary, Kiyoshi Horikawa, OE75:June 75:217
Computer Modeling of Erodible Flood Channels and Deltas, Howard H. Chang and Joseph C. Hill, HY10:Oct 76:1461:12485
Controlling Runoff from Construction Sites, Eugene E. Dallaire, CE:Oct 76:73
Deposition and Erosion in the Dredge Spoil and Other New York Bight Dumping Areas, George L. Freeland and George F. Merrill, DIEE:Jan 76:936
Dynamic Behavior Model of Ephemeral Stream, Kenneth G. Renard and Emmett M. Laursen, HY5: May 75:511:11315
Effects of Meandering in Alluvial Streams, Yasuo Onishi, Subhash C. Jain and John F. Kennedy, HY7:July 76:899:12248
Emergency Assistance on Flood Damage in North Dakota Under Section 216 of the Flood Control Act of 1950, A. Richard Moum, IR76:July 76:76
Environmental Aspects—Sacramento Bank Protection, Charles S. Mifkovic and Margaret S. Petersen, HY5:May 75:543:11326
Field Performance of Permeable Breakwater, John C. Ludwick, Peter Fleischer, Ronald E. Johnson and Gerald L. Shideler, WW4:Nov 75:357:11703
Finite Element Model for Cohesive Sediment Transport, Ranjan Ariathurai and Ray B. Krone, HY3:Mar 76:323:11987
Fundamentals of Piping, Richard F. Flanagan, Preprint No.2766, Sept 76, 18pp.
Hydraulics of Slope Erosion by Overland Flow, Saburo Komura, HY10:Oct 76:1573:12489
Identification and Nature of Dispersive Soils, James L. Sherard, Lorn P. Dunnigan and Rey S. Decker, GT4:Apr 76:287:12052
Incipient Sediment Motion in Entrances with Shell Beds, Ashish J. Mehta and Bent A. Christensen, WW76:Aug 76:960
Initial Operation of the Pakistan Link Canals, Lyman R. Flook, Jr., WW76:Aug 76:1737
Integral-Equation Analysis of Flows Over Eroding Beds, S. N. Prasad and Carlos V. Alonso, WW76: Aug 76:760
Nonequilibriun River Form, Michael A. Stevens, Daryl B. Simons and Everett V. Richardson:, HY5: May 75:557:11334
Oregon Coast Shoreline Changes Due to Jetties, Paul D. Komar, Jose Roman Lizarraga-Arciniega and Thomas A. Terich, WW1:Feb 76:13:11933
Pinhole Test for Identifying Dispersive Soils, James L. Sherard, Lorn P. Dunnigan, Rey S. Decker and Edgar F. Steele, GT1:Jan 76:69:11846
Placing Artificial Beach Nourishment, J. William Kamphuis and S. G. Bridgeman, OE75:June 75:197
Pore and Eroding Fluid Influences on Surface Erosion on Soil, Kandiah Arulanandan, Paripurnanandan Loganathan and Ray B. Krone, GT1:Jan 75:51:11078
Remote Classification of Marine Sediments, Arthur S. Westneat, DIEE:Jan 76:289
Sea Cliff Base Erosion, San Diego, California, Louis J. Lee, Charles Pinckney and Charles Bemis, Preprint No.2708, Apr 76, 14pp.
Side Scan Sonar Views of Channel Disturbances Associated with Marine Traffic and Dredging, Larry S. Slotta, DIEE:Jan 76:226
Simulation of Agricultural Runoff, Anthony S. Donigian, Jr. and Norman H. Crawford, Preprint No.2670, Apr 76, 27pp.
Simulation of Shoreline and Nearshore Currents, Tamio Sasaki, OE75:June 75:179
Soil Erosion and Sediment Transport from Gullies, Robert F. Piest, Joe M. Bradford and George M. Wyatt, HY1:Jan 75:65:11069
Stormwater Studies and Alternatives in Atlanta, Robert F. Holbrook, Armando I. Perez, Billy G. Turner and Herbert I. Miller, EE6:Dec 76:1263: 12614
Suspended Sediment in Chesapeake Bay, J. R. Schubel, OE75:June 75:245
Tests of Scour Protection for Bridge Piers, Chesley J. Posey, HY12:Dec 74:1773:11017
Urban Sediment Problems: A Statement on Scope, Research, Legislation and Education, Harold P. Guy, Chmn., HY4:Apr 75:329:11256

Erosion Control
Controlling Runoff from Construction Sites, Eugene E. Dallaire, CE:Oct 76:73
Estimation of Rainfall Erosion Index, John K.H. Ateshian, IR3:Sept 74:293:10817
Highway Fill — A Broad-Crested Weir, Beverly M. Johnson, CE:Oct 76:60
Inverted Filter Stabilizes Soil, Stops Erosion, Chesley J. Posey, CE:Apr 76:78
Mild Slope Stable Channels — A Stochastic Design Approach, Bent A. Christensen, Preprint No.2680, Apr 76, 14pp.
New Method for Beach Erosion Control, Jerry L. Machemehl, Thomas J. French and Norden E. Huang, OE75:June 75:142

Error Analysis
Finite Element Analysis of Linear Dynamic Behavior, John S. Archer, Preprint No.2765, Sept 76, 30pp.

Errors
Image Error and Photogrammetric Requirements, G. Warren Marks, SU1:Dec 76:39:12607
A Numerical Solution for Viscoelastic Half Planes, Gautam Dasgupta, EM4:Aug 76:601:12325
Procedural Errors in Alluvial Channel Measurements, Tariq Masood, Khalid Mahmood and M. M. Siddiqui, WW76:Aug 76:591
Roundoff Error Characteristics in Direct Stiffness Solutions, Farouk S. Nasser, ST76:76:374
Side Friction in Model Retaining-Wall Experiment, Peter L. Bransby and Ian A.A. Smith, GT7:July 75: 615:11447

Esthetics
Aesthetics is a Do-It-Yourself Project, Raymond C. Reese, ST76:Aug 76:33
Art in Engineering - The Need for a New Criticism, David P. Billington, PP4:Oct 73:499:10102
Civil Engineering Esthetics—State-of-the-Art, Clayford T. Grimm and Wolfgang F.E. Preiser, ST8:Aug 76:1531:12322
The Color of Structures, Clayford T. Grimm, ST9: Sept 75:1871:11547
Evaluating the Constructed Environment; A Comparison of Two Biomedical Research Laboratories, Robert Gutman and Barbara Westergaard, EFAN:Dec 74:14
How Almost Anyone Can Design a Good Looking Bridge in One Easy Lesson, William Zuk, ST76: Aug 76:19
Keynote Adress - Man as the Measure, Nathaniel A. Owings and Cabell Gwathmey, EFAN:Dec 74:5
Legal Perspective on Water Quality Management, Douglas R. Blazey, HY5:May 75:595:11320

Maintaining Water Quality in Voyageurs National Park, William H. Anderl, Preprint No.2686, Apr 76, 14pp.
Nonquantitative Methods in Water Resources Management, Rammohan K. Ragade, Keith W. Hipel and Tharakkal E. Unny, WR2:Nov 76:297:12565
Principles of Composition in Building Art, Clayford T. Grimm, ST9:Sept 75:1739:11544
Rationalized Esthetics in Civil Engineering, Clayford T. Grimm, ST9:Sept 75:1813:11546
Session VI — Socio-Economic Problems, Conception Tan, EFEEC:Aug 75:421
Some Esthetic Considerations in Steel Design, Thomas C. Kavanagh, ST11:Nov 75:2257:11718
Some Historic Bridges of the United States, Sara Ruth Watson, EI3:July 75:383:11425
Thinking Aesthetically is a Part of Structural Engineering, Frederick M. Law, ST76:Aug 76:1
Viaducts—A Case Study, Rowland Richards, Jr. and David G. Elms, EI4:Oct 74:293:10845
Visual Quality Controls in Highway Design, Bob L. Smith, TE3:Aug 75:479:11487
Winners of 1975 Highway Environment Awards; Competition Open for '76, CE:June 76:12

Estimated Costs
Predesign Cost-Estimation Function for Buildings, Vasily Kouskoulas and Edward Koehn, CO4:Dec 74:589:10992

Estimates
Analysis of Dredging Projects, William B. Pearce, DIEE:Jan 76:139
Concepts of Project Planning and Control, Boyd C. Paulson, Jr., CO1:Mar 76:67:11984
Conceptual RMC/Time Synthesis, Marvin Gates and Amerigo Scarpa, CO2:June 76:307:12181
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., Preprint No.2643, Apr 76, 10pp.
Estimating—State-of-the-Art, Carl A. Erikson and LeRoy T. Boyer, CO3:Sept 76:455:12382
Estimation and Control of Construction Labor Costs, Boyd C. Paulson, Jr., CO3:Sept 75:623:11579
New Methods in Construction Systems, R. Richard LeVitt, CO3:Sept 74:211:10788
Optimum Size of Equipment, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:861:11772
Optimum Size of Hauling Units, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:853:11771
Processing Variable Forms for Travel Estimation, Jason C. Yu and Robert J. Popper, TE1:Feb 76:91:11938

Estimating
Predesign Cost-Estimation Function for Buildings, Vasily Kouskoulas and Edward Koehn, CO4:Dec 74:589:10992

Estuaries
Applications of Mixing Experiments to Estuaries, Robert R. Long, OE75:June 75:1400
Channelization of River Bhargavi, India, Bishnu P. Das, WW76:Aug 76:1700
Chemical Reactions During Disposal Operations, Thomas H. Wakeman and Calvin C. Fong, Preprint No.2712, Apr 76, 18pp.
Classification of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY10:Oct 75:1315:11643
Computation of Tidal Flow in Well-Mixed Estuaries, Carl E. Pearson and Donald F. Winter, HY3:Mar 76:367:11990
Distribution of Toxic Heavy Metals in Marine and Freshwater Sediments, J. M. Brannon, R. M. Engler, J. R. Rose, P. G. Hunt and I. Smith, DIEE:Jan 76:455
Dredging and the Environmental Policy Act of 1969, James H. Bradley, DIEE:Jan 76:39
Finite Element Model for Cohesive Sediment Transport, Ranjan Ariathurai and Ray B. Krone, HY3:Mar 76:323:11987
Impact of Dredging on Water Quality in Grays Harbor, Washington, John M. Smith, James B. Phipps, Eugene B. Schermer and Don F. Samuelson, DIEE:Jan 76:512
Implementation of Interstate Water Quality Plan, Cecil H.J. Hull, HY3:Mar 75:495:11177
Incipient Sediment Motion in Entrances with Shell Beds, Ashish J. Mehta and Bent A. Christensen, WW76:Aug 76:960
Influence of Tidal Inlets on Salinity in Estuaries, N. Jothi Shankar, WW4:Nov 75:369:11692
Large-Scale Estuarine Water Quality Matrix Model, Bhaskara R. Penumalli, Robert H. Flake and E. Gus Fruh, EE1:Feb 76:191:11946
Measurements of Estuary Dispersion Coefficients, Peter R.B. Ward, TN: EE4:Aug 76:855:12285
Model of Hurricane Tide in Cape Fear Estuary, James E. Overland and Vance A. Myers, WW4:Nov 76:407:12549
Numerical Computation of Two-Dimensional Flows, John P. Grubert, WW1:Feb 76:1:11891
Numerical Computation of Well-Mixed Estuarine Flows, John P. Grubert, HY7:July 76:955:12255
Numerical Model of St. Lawrence River Estuary, David Prandle and Norman L. Crookshank, HY4:Apr 74:517:10472
Photographic Remote Sensing of Bolinas Lagoon, California, Douglas M. Pirie and Michael J. Murphy, Preprint No.2647, Apr 76, 17pp.
The Port of New Orleans in the 18th Century — The Formative Years, Herbert R. Haar, Jr., Preprint No.2783, Sept 76, 15pp.
The Port of Philadelphia — Past and Present, Clarence F. Wicker, Preprint No.2774, Sept 76, 20pp.
Predicting Estuarine Salinity from River Inflows, James A. Harder, Preprint No.2674, Apr 76, 23pp.
Real Time Model of the Nitrogen Cycle in an Estuary, Tavit O. Najarian and Donald R.F. Harleman, Preprint No.2676, Apr 76, 30pp.
Regional Impacts from Water Consumption and Heat Disposal in River Basins and Estuaries, Edwin T. Engman, EFEEC:Aug 75:131
Review of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY11:Nov 75:1405:11693
Salinity Induced Horizontal Estuarine Circulation, Brady A. Elliott and Robert O. Reid, WW4:Nov 76:425:12550
Salinity Intrusion Mechanisms in Estuaries, John M. Hamrick, OE75:June 75:1382
Sediment Flushing after Dredging in Tidal Bays, Klas Cederwall and Torbjorn Svensson, HY7:July 76:935:12229
Sediment Movement in Tubbs Inlet, North Carolina, Jerry L. Machemehl, Robert P. Masterson, Jr. and Victor V. Cavaroc, Jr., OE75:June 75:313
Sensitivity of Estuarine Circulation Model, John D. Wang, OE75:June 75:1035
Some Remarks on Computer Modeling of Coastal Flows, Hugo B. Fischer, WW4:Nov 76:395:12520
Stability Problems for the Navigation Channel in a Tidal River, Egon Giese, WW76:Aug 76:280
Strategic Approach to Estuarine Environmental Management, David A. Bella, WW1:Feb 75:73:11109
Thames Barrier Project, P. A. Cox, P. J. Clark and G. Miller-Richards, WW76:Aug 76:852
Tide-Induced Mass Transport in Lagoons, Jacobus van de Kreeke and Robert G. Dean, WW4:Nov 75:393:11731
Transverse Dispersion in Oscillatory Channel Flow, Peter R.B. Ward, HY6:June 74:755:10589
Ultimate Fate of Suspended Material in Estuaries, Ray B. Krone, DIEE:Jan 76:180
Use of Remote Sensing for Mapping Wetlands, Robert J. Reimold and Rick A. Linthurst, TE2:May 75:189:11293
Viaducts—A Case Study, Rowland Richards, Jr. and David G. Elms, EI4:Oct 74:293:10845
Wind-Driven Flow of Water Influenced by a Canopy, Robert O. Reid and Robert E. Whitaker, WW1:Feb 76:61:11926

Ethics
Action Program for Elimination of Unethical Practices in the Engagement of Professional Services, John W. Frazier, Chmn., EI2:Apr 75:267: 11210
The Code of Ethics of the American Society of Civil Engineers, Mario G. Salvadori, EI2:Apr 75:215: 11252
Ethics: Wisconsin Section Sparks Timely Discussion, Robert W. Brannan, CE:May 76:90
Historical Sites and the Construction Engineer, Mario G. Salvadori, CO2:June 76:295:12183
Is There Price Collusion in the Civil Engineering Profession?, Michael N. Goodkind, EI3:July 76: 301:12258
Method of Developing Optimum Tolerances, Emilio Rosenblueth and Alejandro Asfura, ST2:Feb 76: 323:11889
Motivation of Students Towards Professional Thinking, Milton Alpern, EI3:July 75:413:11435
New Ethical Canons Adopted by Board, CE:Nov 76: 82
Progress Report on Development of A Code of Ethics, Marvin W. Runyan, EI2:Apr 75:199:11225
Public Versus Client Interests - An Ethical Dilemma for the Engineer, Terry L. Turnock, EI1:Jan 75:61: 11083
Social Responsibility Within the Present Code of Ethics, George C. Govatos, EI3:July 75:351:11412
Towards Optimum Design Through Building Codes, Emilio Rosenblueth, ST3:Mar 76:591:11999
When the Going Gets Tough, the Tough Get Going, Leland J. Walker, CE:Nov 76:65

Eutrophication
Maintaining Water Quality in Voyageurs National Park, William H. Anderl, Preprint No.2686, Apr 76, 14pp.
Phosphate Release and Sorption by Lake Mohegan Sediments, John Fillos and Hiranmay Biswas, EE2: Apr 76:239:12029
Presenting Trends in Lake Eutrophication, Stanley Hershman and Samuel O. Russell, TN: EE6:Dec 76:1281:12638
Wind Control of Algae Growth in Eutrophic Lakes, Heinz Stefan, Timothy Skoglund and Robert O. Megard, EE6:Dec 76:1201:12619

Evaluation
Analysis of Urban Transportation Criteria, Thabet Zakaria, TE3:Aug 75:521:11496
Comparison of Methods for Liquefaction Evaluation, Julio E. Valera and Neville C. Donovan, Preprint No.2752, Sept 76, 30pp.
Economic Evaluation Techniques for Bicycle-Pedestrian Systems: A Case Study, Jack Dorman and Michael Everett, BP75:Dec 75:454
Evaluating Air Pollution Impacts of Transportation, Edward C. Sullivan, TE4:Nov 75:763:11721
Evaluating Costs for Port Distribution Systems, Richard G. Waugh, Jr., WW4:Nov 75:385:11723
Evaluating Multi-Modal Alternatives: San Diego/Los Angeles Corridor Study, Darwin G. Stuart, Preprint No.2666, Apr 76, 29pp.
Evaluation of an Existing Building Complex for Earthquake Response, Sigmund A. Freeman, ST76: Aug 76:781
Evaluation of Friction Slope Models, Joseph R. Reed and Albert J. Wolfkill, WW76:Aug 76:1159
Evaluation of Soil Liquefaction Effects on Level Ground During Earthquakes, H. Bolton Seed, Preprint No.2752, Sept 76, 104pp.
Facility Location Example of Evaluation Methodology, John S. Hoffman, TE4:Nov 75:817: 11727
Integrating Evaluation at the Project Scale, Alan M. Voorhees, UP1:Aug 76:35:12351
Measuring Quality of Constructions with Man as the Measure, Ronald W. Petersen, EFAN:Dec 74:70
Measuring Transportation System Performance, Thomas R. Mongan, N. J. Nielsen and J. R. Formby, TE3:Aug 75:437:11483
Pilots Evaluation of the D/FW Airport, Woody Lockhart, EFAN:Dec 74:201
Social Evaluation of Land-Use Controls, Morton Lustig, UP1:Aug 76:111:12356
Staging of Improvements to Air Transport Terminals, Angus J. McKenzie, Jack W.E. Huggett and Kenneth W. Ogden, TE4:Nov 74:855:10920
Summary — Case Study of Dallas/Fort Worth Airport, Jack D. Downey, EFAN:Dec 74:165
Summary for Session IV —Case Study of Dallas/Fort Worth Airport, Jack L. Mahan, Jr., EFAN:Dec 74: 265

Evaporation
Comparison of Warm Water Evaporation Equations, Richard N. Weisman, HY10:Oct 75:1303:11620
The Dissipation of Excess Heat from Water Systems, Harvey E. Jobson, PO1:May 73:089:9702
Dry-Wet Tower Evaporation and Fog Psychometrics, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:21:11828
Effects of Irrigation Scheduling and Coordinated Delivery on Irrigation and Drainage Systems, Roy D. Gear, Arnold S. Dransfield and Melvin D. Campbell, Preprint No.2720, Apr 76, 18pp.
Intercontinental Comparison of Evaporation Estimates, Robert D. Burman, IR1:Mar 76:109: 11958
Optimization of Evaporation Pond Cost, Subhash C. Mehrotra, EE1:Feb 76:165:11942
Russia Redistributes River Flow, Norman Precoda, CE:Feb 75:72
Simulation Model for Evapotranspiration of Wheat: Empirical Approach, Daniel Shimshi, Dan Yaron, Eshel Bresler, Mordechai Weisbrod and Gad Strateener, IR1:Mar 75:1:11170

Evaporation Control
Evaporation Reduction with Reflective Covers, Keith R. Cooley and Lloyd E. Myers, IR3:Sept 73:353: 9982

Evaporation Reservoirs
Impermeable Asphaltic Concrete Pond Liner, R. Dale Hinkle, Jr., CE:Aug 76:56
Optimization of Evaporation Pond Cost, Subhash C. Mehrotra, EE1:Feb 76:165:11942

Evapotranspiration
Climatological Estimates of Evapotranspiration, Fred I. Morton, HY3:Mar 76:275:11974
Correlation Analysis of Hydrometeorological Data, Ashok N. Shahane, Daniel Thomas and Paul Bock, HY10:Oct 76:1561:12484
Drawdown Solutions for Simultaneous Drainage and ET, R. Wayne Skaggs, IR4:Dec 75:279:11804
Effects of Man on Low Flows, Henry C. Riggs, IR76: July 76:306
Functions to Predict Optimal Irrigation Programs, J. Ian Stewart, Robert M. Hagan and William O. Pruitt, IR2:June 74:179:10626
Simulation Model for Evapotranspiration of Wheat: Empirical Approach, Daniel Shimshi, Dan Yaron, Eshel Bresler, Mordechai Weisbrod and Gad Strateener, IR1:Mar 75:1:11170
Simulation Model for Evapotranspiration of Wheat: Effect of Evaporative Conditions, Gad Strateener, Dan Yaron, Eshel Bresler and Daniel Shimshi, IR1: Mar 75:13:11169
Using Evapotranspiration Data to Favorably Influence an Irrigated Environment, E. H. Hobbs and K. K. Krogman, IR76:July 76:184

Evolution (Development)
Water Resources Planning — Its Recent Evolution, Harry E. Schwarz, Preprint No.2754, Sept 76, 18pp.

Excavating Equipment
Development and Future of Dredging, Adolph W. Mohr, WW2:May 74:69:10513

Excavation
Construction of Grand Coulee Third Power Plant, Donald J. Duck, CO4:Dec 75:869:11774

Construction Redesign — Woodstock Rockslide, N.H., Brian K. Fowler, GT76:Aug 76:386
Deformation of Deep Excavations, Dieter Stroh and Herbert Breth, NMG:June 76:II-686
Development and Future of Dredging, Adolph W. Mohr, WW2:May 74:69:10513
Diaphragm Wall Construction Techniques, Kevin L. Nash, CO4:Dec 74:605:11025
Earthwork Volumes by Contour Method, Francis E. Smith, CO1:Mar 76:131:11977
Finite Element Analysis of Stresses and Movements in Excavations, Hiromitsu Izumi, Katsumi Kamemura and Seiichi Sato, NMG:June 76:II-701
Historical Sites and the Construction Engineer, Mario G. Salvadori, CO2:June 76:295:12183
Hydraulic Dredges, Including Boosters, Gail G. Gren, DIEE:Jan 76:115
Initial Stresses in Natural Slope Analysis, Robin N. Chowdhury, GT76:Aug 76:404
Legal Aspects of Open Cut Construction, Louis Cantor, Robert A. Rubin and Eugene H. Goldberg, CO4:Dec 75:923:11767
Lessons Learned in Finite Element Analyses of Temporary Excavations in Soft Clay, G. Wayne Clough and Abdulaziz I. Mana, NMG:June 76:I-496
A Numerical Analysis of the Maximum Earth Pressure Acting on Tunnel Lining, Shunsuke Sakurai and Yoshiaki Yamamoto, NMG:June 76:II-821
Optimum Size of Hauling Units, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:853:11771
Parametric Studies as a Design Aid in Tunneling, K. Kovari, H. Hagedorn and P. Fritz, NMG:June 76:II-773
Performance of Tied-Back Walls in Clay, G. Wayne Clough and Yuet Tsui, GT12:Dec 74:1259:11028
A Performance Standard for Foundations and Excavations, Felix Y. Yokel, CE:Oct 76:80
Recent Legislation Impacting on Dredging Projects, William L. Black, Preprint No.2727, Apr 76, 23pp.
Rigid and Flexible Bracing Systems on Adjacent Sites, Richard G. Tait and Henry T. Taylor, CO2:June 75:365:11376
Rock Slopes in an Urban Environment (A Case History), David E. Pauls and James G. LaBastie, GT76:Aug 76:182
Some Construction Aspects of Tarbela Dam, Morgan H. Thompson, CO3:Sept 74:247:10799
Stability of Trenches Filled with Fluids, Kevin L. Nash, CO4:Dec 74:533:11006
Stress-Strain Behavior of Soft Bangkok Clay, A. S. Balasubramaniam and A. R. Chaudhry, NMG:June 76:I-390
Temporary Excavation in Varved Clay, Donald J. Murphy, G. Wayne Clough and Robert S. Woolworth, GT3:Mar 75:279:11179
Tied-Back Deep Excavations in Los Angeles Area, Perry A. Maljian and James L. Van Beveren, CO3:Sept 74:337:10791

Exchange Reactions
Pore and Eroding Fluid Influences on Surface Erosion on Soil, Kandiah Arulanandan, Paripurnanandan Loganathan and Ray B. Krone, GT1:Jan 75:51:11078

Excitation
Approximate Method for Nonlinear Random Vibration, Yi-Kwei Wen, EM4:Aug 75:389:11500
Aspects of Dynamic Stability of Structures, Horst H.E. Leipholz, EM2:Apr 75:109:11229
Fluid-Dynamic Excitation Involving Flow Instability, Wallace W. Martin, Eduard Naudascher and Mahadevan Padmanabhan, HY6:June 75:681:11361
Vibration-Absorber Effect under Seismic Excitation, Richard G. Dong, ST10:Oct 76:2021:12495

Expansion
Design for Differential Movement in Brick Walls, Clayford T. Grimm, ST11:Nov 75:2385:11739

Expansive Clays
Finite Element Analysis of Piles in Expansive Media, Joram M. Amir and M. Sokolov, GT7:July 76:701:12256

Expansive Concrete
Control of Expansive Concretes During Construction, Clyde E. Kesler, CO1:Mar 76:41:11968

Expansive Soils
A Case History of Expansive Claystone Damage, Richard L. Meehan, Michael T. Dukes and Patrick O. Shires, GT9:Sept 75:933:11590
Review of Expansive Soils, Gerald J. Gromko, GT6:June 74:667:10609

Expenditures
Systems Analysis in Evaluating the Economics of New and Maintenance Dredging Projects, William W.L. Lee, DIEE:Jan 76:364

Experience
Learning and Experience Curves, Marvin Gates and Amerigo Scarpa, CO1:Mar 72:79:8778
Specifications—Design Professionals' Forgotten Challenge, Edward R. Fisk, CO2:June 76:303:12171

Experimental Data
Electro-Osmotic Consolidation of Soils, Tai-Yeu Wan and James K. Mitchell, GT5:May 76:473:12156
New Method for Beach Erosion Control, Jerry L. Machemehl, Thomas J. French and Norden E. Huang, OE75:June 75:142
Nuclear Turbine-Generator Foundation Model Tests, Ish K. Aneja and Brian W. Dimmick, Preprint No.2704, Apr 76, 30pp.
Side Friction in Model Retaining-Wall Experiment, Peter L. Bransby and Ian A.A. Smith, GT7:July 75:615:11447

Experimentation
Buckling Formulas for Corrugated Metal Shear Diaphragms, John T. Easley, ST7:July 75:1403:11429
Experiments for Accuracy and Stability of Heat Conduction, Rao Yalamanchili, NMG:June 76:I-93
Soil-Structure Interaction of Concrete Pipe Systems, Raymond J. Krizek, Ross B. Corotis and Thomas H. Wenzel, ST76:Aug 76:607
Venturi Flumes for Circular Channels, Mordechai H. Diskin, TN: IR3:Sept 76:383:12369

Expositions
Round Table Discussion on Future Conferences, Walter H. Kraft, BP75:Dec 75:585

Exposure
Structural Characteristics of Weathered Plywood, Michael O. Hunt and DeForest A. Matteson, Jr., ST4:Apr 76:759:12050

Extruding
Fiber Reinforced Concrete Extrusion, Ronald F. Zollo, ST12:Dec 75:2573:11798

Fabrication
Commentary on Orthotropic-Deck Bridge Specifications, Charles G. Schilling, Chmn., ST1:Jan 74:109:10273
Fifty-Year Development: Construction of Steel Arch Bridges, William F. Hollingsworth, CO1:Mar 75:85:11187
Integrated System for Production of Joists, A. Murray Lount and Sidney H. Simmonds, ST4:Apr 75:807:11242
Shear of Light-Gage Partitions in Tall Buildings, Wagih M. El-Dakhakhni, ST7:July 76:1431:12257
Steels for the Sea, J. H. Gross, Preprint No.2732, Apr 76, 26pp.

Fabrics
Filter Fabrics: Growing Use in Road and Highway Construction, Eugene E. Dallaire, CE:May 76:61

Plastic Filter Fabrics Have Bright Future, Richard N. Seemel, CE:Mar 76:57

Facilities
Masjid (Mosque) Planning, Altaf Hussain, UP1:Aug 76:171:12348

Failure
Aluminum Beam Webs Under Concentrated Loads, Maurice L. Sharp, ST76:Aug 76:569
Anisotropy for Finite Element Analysis, Ravikumar Bhaskaran, NMG:June 76:I-345
Application of Stability Analyses to Slope Design, Umakant Dash, NMG:June 76:II-725
Bailey's Crossroads: A/E Liability Test, Virginia Fairweather, CE:Nov 75:58
Bailey's Crossroads Collapse Reviewed, Ingvar Schousboe, CO2:June 76:365:12186
Cavity Expansion in Sands with Curved Envelopes, Mohsen M. Baligh, GT11:Nov 76:1131:12536
Civil Engineering and Offshore Construction, Ben C. Gerwick, Jr., Preprint No.2753, Sept 76, 6pp.
Cladding and the Wind, Keith J. Eaton, ST5:May 76:1043:12114
Constitutive Relations for Concrete, Andrie C.T. Chen and Wai F. Chen, EM4:Aug 75:465:11529
Construction Helmet Response Under Severe Impact, Werner Goldsmith, CO2:June 75:335:11349
Design of Cooling Towers for Wind, David P. Billington and John F. Abel, ST76:Aug 76:242
Dual Failure Criterion for Plain Concrete, Han-Chin Wu, EM6:Dec 74:1167:10996
Embankment on Soft and Sensitive Clay Foundation, Oscar Dascal and Jean-Pierre Tournier, GT3:Mar 75:297:11193
Endochronic Theory of Inelasticity and Failure of Concrete, Zdenek P. Bazant and Parameshwara D. Bhat, EM4:Aug 76:701:12360
Evergreen Point Bridge Maintenance Problems, Colin B. Brown, D. R. Christensen and G. F. Demich, ST76:Aug 76:189
Excelling as a Construction Contractor, Altaf Hussain, CO4:Dec 74:621:11029
Failure Hypothesis for Masonry Shear Walls, Felix Y. Yokel and S. George Fattal, ST3:Mar 76:515:11992
Failure Modes for Offshore Platforms: Part II — Fatigue, Peter W. Marshall, ST76:Aug 76:309
Failure of Anchored Sheet Pile Walls, Bengt B. Broms and Hakan Stille, GT3:Mar 76:235:12000
Fatigue Provisions of AASHTO Specifications, Kadir M. Kusmez and Chi C. Tung, ST9:Sept 76:1725:12385
First Passage Probability for Nonlinear Oscillators, J. Brian Roberts, EM5:Oct 76:851:12469
Forces on Many Cylinders Near a Plane Boundary, Tokuo Yamamoto and John H. Nath, Preprint No.2633, Apr 76, 19pp.
Fracture and Stress-Strain Relationship of Concrete Under Triaxial Compression, Ranga Palaniswamy and Surendra P. Shah, ST5:May 74:901:10547
Guidance for Load Tests of Buildings, Neal FitzSimons and Anatole Longinow, ST7:July 75:1367:11431
Half a Century of Soil Mechanics—Some Thoughts for the Future in the Light of the Past, Gregory P. Tschebotarioff, EI3:July 76:321:12251
Incremental Stress-Strain Relationship for Cohesionless Soil, F. Darve, S. Labanieh and R. Chambon, NMG:June 76:I-264
Inelastic Sway Buckling of Multistory Frames, Francois Cheong-Siat-Moy, ST1:Jan 76:65:11848
Initial Stresses in Natural Slope Analysis, Robin N. Chowdhury, GT76:Aug 76:404
Liquefaction during 1906 San Francisco Earthquake, T. Leslie Youd and Seena N. Hoose, GT5:May 76:425:12143
Local and Overall Buckling of Cold-Formed Members, John T. DeWolf, Teoman B. Pekoz and George Winter, ST10:Oct 74:2017:10875
The National Dam Inspection Program, Charles F. Corns, CE:Apr 75:75
Nonlinear Seismic Response of a Coupled Wall System, Stephen A. Mahin and Vitelmo V. Bertero, ST9:Sept 76:1759:12407
Photoelastic Analysis of a Cofferdam, Naveed K. Burki and Rowland Richards, Jr., GT2:Feb 75:129:11135
Photoelastic Model of Bridge Cross-Frame Junction, Alex S. Redner and Leonard Pompa, EM4:Aug 76:659:12347
Probabilistic Approach to Design of Riprap for River Bank Protection, Ruh-Ming Li, Daryl B. Simons, Paul H. Blinco and Md. Abdus Samad, WW76:Aug 76:1572
A Probabilistic Design Approach Using the Palmgren-Miner Hypothesis, Paul H. Wirsching and James T.P. Yao, ST76:Aug 76:324
Probability of Failure of Building from Fire, Raymond H. Burros, ST9:Sept 75:1947:11567
Progressive Collapse Discussed in Texas, CE:Feb 76:20
Punching Shear Strength of Restrained Slabs, Brian E. Hewitt and Barrington deV. Batchelor, ST9:Sept 75:1837:11548
Reliability Theory of Deteriorating Structures, Hiroyuki Kameda and Takeshi Koike, ST1:Jan 75:295:11079
Report on Observations of Attendees at the EF Conference on 'Life Span of Structures', Michael N. Salgo, EI1:Jan 76:47:11870
Risk of Wind Damage to Transmission Line Systems, Alain H. Peyrot and Tarun R. Naik, ST76:Aug 76:54
Rutting Failure in Full-Depth Asphalt Pavement, Jacob Greenstein and Moshe Livneh, TE4:Nov 75:737:11690
Shaft Failure of Large Axial Flow Pumps, Christopher A. Gardner and Howard T. Hill, PO2:Nov 76:209:12575
Shear Failure Due to Web Crushing in Prestressed Concrete I-Beams, Larp Chitnuyanondh, T. Ivan Campbell, Barrington deV. Batchelor and Paul Csagoly, T76:Aug 76:476
Sheet Pile Interlock Tension-Probabilistic Design, James Neil Kay, GT5:May 76:411:12122
Simplified N-Dimensional Interaction Surfaces, Thomas A. Duffey and Howard L. Schreyer, ST7:July 76:1291:12230
Strength of One Dimensionally Consolidated Clays, Adel S. Saada and Gary F. Bianchini, GT11:Nov 75:1151:11707
Stress and Stability Analyses of Underground Openings Taking Post-Failure Behavior of Rock into Consideration, T. Kawamoto and T. Saito, NMG:June 76:II-791
Structural System Failure Analysis in a High Load Environment, Jon D. Collins, ST76:Aug 76:39
Survival in the Legal Jungle, Frederick J. Richards, Jr., Preprint No.2761, Sept 76, 4pp.
Test Loading of Piles and New Proof Testing Procedure, Bengt H. Fellenius, GT9:Sept 75:855:11551
Tests and Analysis of Beam-to-Column Web Connections, Wai F. Chen and Glenn P. Rentschler, ST76:Aug 76:957
Wind Climate and Failure Risks, Emil Simiu, ST9:Sept 76:1703:12389
Window Glass Failures in Windstorms, Joseph E. Minor and W. Lynn Beason, ST1:Jan 76:147:11834
Windspeeds Analyses of April 3-4, 1974 Tornadoes, Kishor C. Mehta, Joseph E. Minor and James R. McDonald, ST9:Sept 76:1709:12429
Yielding of Sand in Plane Strain, Sam Frydman, GT5:May 74:491:10540

Failures
Case History — Problems in Obtaining Repairs to Barber Dam, A. Kenneth Dunn, EFRLD:Sept 75:93
Concrete Failure Related to Constituent Properties, Rene B. Testa and Norris Stubbs, EM3:June 76:515:12212
Dam Safety — Texas Style, Joe D. Carter, EFRLD:Sept 75:79

Factors Affecting Liquefaction and Cyclic Mobility, Gonzalo Castro Salas and Steve J. Poulos, Preprint No.2752, Sept 76, 34pp.
Failures in Limestones in Humid Subtropics, George F. Sowers, GT8:Aug 75:771:11521
Judgment in Dam Design, William A. Wahler, EFRLD:Sept 75:167
Opening Remarks, Joseph J. Ellam, EFRLD:Sept 75:1
Stability of Embankment on Clay, Tien H. Wu, William B. Thayer and Sheng S. Lin, GT9:Sept 75:913:11584
Structural Failures and How to Prevent Them, Dov Kaminetzky, CE:Aug 76:60

Failure Surfaces
Cone Penetration of Granular and Cohesive Soils, Raymond N. Yong and Choong-Kong Chen, EM2:Apr 76:345:12081

Fares
Analysis of Metered Taxi Fares, David Ghahraman, Tung Au and Dwight M.B. Baumann, TE4:Nov 75:807:11735

Far Field
Vertical Temperature Profiles in Open-Channel Flow, Eric J. Schiller and William W. Sayre, HY6:June 75:749:11389

Fasteners
Analysis and Design of Griplam Nailed Connections, Ricardo O. Foschi and Jack Longworth, ST12:Dec 75:2537:11766
Fifty Years of Riveted, Bolted, and Welded Steel Construction, William E. Munse, CO3:Sept 76:437:12399
High-Strength Bolted Connections Subject to Prying, Henning Agerskov, ST1:Jan 76:161:11840
Shear of Light-Gage Partitions in Tall Buildings, Wagih M. El-Dakhakhni, ST7:July 76:1431:12257

Fatigue (Materials)
Analysis of Fatigue of Welded Crane Runway Girders, David A. Demo and John W. Fisher, ST5:May 76:919:12106
Failure Modes for Offshore Platforms: Part II — Fatigue, Peter W. Marshall, ST76:Aug 76:309
Fatigue and Fracture of Bridge Steels, Richard Roberts and George R. Irwin, ST2:Feb 76:337:11913
Fatigue of Periodically Overloaded Stiffener Detail, Ali Abtahi, Pedro Albrecht and George R. Irwin, ST11:Nov 76:2103:12516
High Strength Bolts Subject to Tension and Prying, R. Shankaran Nair, Peter C. Birkemoe and William H. Munse, ST2:Feb 74:351:10373
Low-Temperature Tests of Simulated Bridge Members, Charles G. Schilling, Karl H. Klippstein, John M. Barsom, Stephan R. Novak and Gilbert T. Blake, ST1:Jan 75:31:11049
A Probabilistic Design Approach Using the Palmgren-Miner Hypothesis, Paul H. Wirsching and James T.P. Yao, ST76:Aug 76:324
Problems in Long-Life Fatigue Assessment for Fixed Offshore Structures, Peter W. Marshall, Preprint No.2638, Apr 76, 24pp.
Report on Observations of Attendees at the EF Conference on 'Life Span of Structures', Michael N. Salgo, EI1:Jan 76:47:11870
Service Load and Fatigue Tests on Truss Bridges, Hotten A. Elleby, Wallace W. Sanders, Jr., F. Wayne Klaiber and M. Douglas Reeves, ST12:Dec 76:2285:12625
Steels for the Sea, J. H. Gross, Preprint No.2732, Apr 76, 26pp.
Stress Cycles for Fatigue Design of Railroad Bridges, Roman Wolchuk and Ronald M. Mayrbaurl, ST1:Jan 76:203:11857

Fatigue Tests
Fatigue Life Extension of Riveted Connections, Harold S. Reemsnyder, ST12:Dec 75:2591:11795

Feasibility Studies
Marine Alternatives for Rapid Transit in Hawaii, Theodore T. Lee, WW76:Aug 76:107
Mathematical Model of the Bicol River System (Luzon, Philippines), Armando Ballofet and Virgilio A. Sahagun, WW76:Aug 76:170
Regime Studies of the Lower Fraser, Alfred John Tamburi, WW76:Aug 76:1680

Federal Agencies
Dams for Others, Neil F. Bogner, EFRLD:Sept 75:137
Fox Responds to New York Times Article on New EPA Regs, Arthur J. Fox, Jr., CE:Feb 76:87

Federal Aid
Present and Future Trends in Harbor and Port Facilities, Billy E. Smith, Preprint No.2814, Sept 76, 10pp.

Federal Budgets
A Construction Industry R&D Incentives Program, Donald C. Taylor, Joseph C. Kellogg and Michael C. Wilkinson, EI3:July 76:369:12271

Federal Control
Progress Report on Development of A Code of Ethics, Marvin W. Runyan, EI2:Apr 75:199:11225

Federal Government
Energy Complexes: The Federal Government's Views, R. Michael Hartman, EFEEC:Aug 75:334
The Energy Crisis/Bicycles/Federal Government, Nina Dougherty Rowe, BP75:Dec 75:19
Section VII — Licensing, Peter L. Ames, EFEEC:Aug 75:425
What Has ASCE Done for Me Lately, William M. Sangster, CE:Oct :80

Federal Jurisdiction
Liability of the United States Under the Federal Tort Claims Act (28 U.S.C. ¶¶ 1346(b), 2672-80), John R. Little, Jr., EFRLD:Sept 75:121

Federal Laws
Analysis of an Irrigation Return Flow Issue, Warren Jamison, John E. Knoll and Thomas J. Crooks, IR76:July 76:532
Coastal Management: Impact on the Ocean Engineer, Francis X. Cameron, OE75:June 75:1451
Elutriation of Dredge Material in New Orleans Harbor, Charles Grimwood and Terence J. McGhee, WW76:Aug 76:476
Emergency Assistance on Flood Damage in North Dakota Under Section 216 of the Flood Control Act of 1950, A. Richard Moum, IR76:July 76:76
Energy Complexes: The Federal Government's Views, R. Michael Hartman, EFEEC:Aug 75:334
Evolution of 208 Water-Quality Planning, Leon G. Billings, CE:Nov 76:54
Evolving National Water Policies, Gary D. Cobb, EI3:July 75:375:11427
Federal Legislation and Activities for Dam Safety, Homer B. Willis, EFRLD:Sept 75:5
The Goals of Water Resources Planning and Management, Carl H. Gaum, Preprint No.2719, Apr 76, 17pp.
Grantspersonship Roundtable Minutes, Ira N. Pierce, BP75:Dec 75:587
How to Save for Retirement and Cut Income Tax, CE:Mar 76:70
Impact of Public Law 92-532 on Dredging and Disposal, Kenneth S. Kamlet, DIEE:Jan 76:49
Is There Price Collusion in the Civil Engineering Profession?, Michael N. Goodkind, EI3:July 76:301:12258
The "Kiechel Bill:" A Misguided Attempt to Resolve Federal-State Water Rights Conflicts, D. Craig Bell, Preprint No.2652, Apr 76, 15pp.
Land Use and Flood Management, Kenneth R. Wright and Ruth M. Wright, WW76:Aug 76:147
Legal-Institutional Framework for the Continental Shelf, Paul O. Bleecker, OE75:June 75:1437

Legislative Impact of P.L. 92-500 on Dredging, David H. Webb and Alfred P. Holmes, Jr., DIEE: Jan 76:83
Legislative Impacts on Dredging — General Regulatory Functions, Charles W. Hollis, DIEE:Jan 76:1
Liability of the United States Under the Federal Tort Claims Act (28 U.S.C. ¶¶ 1346(b), 2672-80), John R. Little, Jr., EFRLD:Sept 75:121
Municipal Problems with P.L. 92-500 — Conformance Versus Performance, Arthur F. Vondrick, Preprint No.2645, Apr 76, 15pp.
The National Dam Inspection Program, Charles F. Corns, CE:Apr 75:75
National Environmental Policies and the Effect on Productivity Through Regulation, Norman E. Hill, PROD:Aug 76:277
National Land-Use Policy: Is it Needed?, Daniel A. Dreyfus, UP1:Aug 76:9:12324
National Program of Inspection of Dams — Existing Practices and Capabilities, Charles F. Corns, EFRLD:Sept 75:17
National Program of Inspection of Dams — *NATIONAL DAM INVENTORY*, Samuel H. Miles, EFRLD:Sept 75:23
Opening Remarks, Joseph J. Ellam, EFRLD:Sept 75:1
Origins of Federal Waterways Engineering, Leland R. Johnson, WW76:Aug 76:1130
Planning and Implementation under Section 208, William C. Lienesch and Gerald A. Emison, WR2: Nov 76:283:12556
PL 92-500 to Cost Metal Finishing Industry $45 Billion, Eugene E. Dallaire, CE:Sept 76:84
Reclamation and Western Development, Donald J. Duck, WW76:Aug 76:1114
Report of the Roundtable on Legislation, Marie E. Birnbaum, BP75:Dec 75:590
Response of South Platte to Effluent Limitations, David W. Hendricks and Mark H. Bluestein, EE4: Aug 76:745:12294
Salinity Control and Federal Water Quality Act, Michael B. Bessler and John T. Maletic, HY5:May 75:581:11321
Some Thoughts on Zero Discharge, Paul Fleming, EI2:Apr 76:179:12082
Tough Pollution Laws Spur Use of Impermeable Liners, Eugene E. Dallaire, CE:May 75:63
Uniformity among Weather Modification Laws, Ray Jay Davis, IR3:Sept 76:285:12379
Will Industry Meet Water-Quality Goals?, Eugene E. Dallaire, CE:Dec 75:68
208: A Process for Water Quality Management, Mark A. Pisano, CE:Nov 76:55

Federal Project Policy
A Construction Industry R&D Incentives Program, Donald C. Taylor, Joseph C. Kellogg and Michael C. Wilkinson, EI3:July 76:369:12271
The Oceans and American Policy, Thomas A. Clingan, Jr., OE75:June 75:1490

Federal Role
OTA: Mixing Technology and National Goals, Emilio Q. Daddario, CE:Dec 75:78

Federal-State Cooperation
Coastal Management: Impact on the Ocean Engineer, Francis X. Cameron, OE75:June 75:1451
Intergovernmental Guidance of Land Use and Growth, Bruce D. McDowell, UP1:Aug 76:15:12319
Your Water — How Secure?, John W. Bird, IR3:Sept 76:363:12424

Federal State Relationships
Federal-State Relations in Water Quality Planning, Michael S. Alushin, HY3:Mar 75:523:11160
Management of Connecticut River Flood Problems, S. Lawrence Dingman, WW76:Aug 76:832
Review and Responsibility of State Dam Safety Programs, Bruce A. Tschantz, EFRLD:Sept 75:51

Federal-State Water Rights Conflicts
The "Kiechel Bill:" A Misguided Attempt to Resolve Federal-State Water Rights Conflicts, D. Craig Bell, Preprint No.2652, Apr 76, 15pp.

Feedback
Specifications—Design Professionals' Forgotten Challenge, Edward R. Fisk, CO2:June 76:303:12171

Feedback Control
Tendon Control in Tall Structures, John Roorda, ST3:Mar 75:505:11168

Fees
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., Preprint No.2643, Apr 76, 10pp.
Is There Price Collusion in the Civil Engineering Profession?, Michael N. Goodkind, EI3:July 76:301:12258
Long Line Production of Building Elements in United States, Ross H. Bryan, CO1:Mar 75:143:11188

Fellowships
Recommendations for Environmental Engineering Education, Wesley O. Pipes, EE2:Apr 74:243:10459

Females
Statement of Affirmative Action Principles, Benito A. Sinclair, EI3:July 74:183:10688

Fenders
Supertanker Fixed Berth in Open Ocean, Atsushi Seiki and Yasumasha Shimada, CE:Apr 76:56

Ferries
A Model Study of St. Marys River Ice Navigation, James E. Cowley, J. W. Hayden and William W. Willis, WW76:Aug 76:1610

Fertilizers
Irrigation Management Decisions for Minimizing Nitrate Leaching, A. S. Dylla, D. R. Timmons and Hollis Shull, IR76:July 76:168
Subsurface Drainage Related to Agronomic Factors on Brookston Clay Soil, E. F. Bolton and Frank R. Hore, IR76:July 76:221

Fiber Composites
Fiber Reinforced Concrete Extrusion, Ronald F. Zollo, ST12:Dec 75:2573:11798
Pull-Out Mechanism in Steel Fiber-Reinforced Concrete, Antoine E. Naaman and Surendra P. Shah, ST8:Aug 76:1537:12313

Fiberglass Reinforced Plastics
Structural Economy of Certain Scalloped Shells, Ravindra K. Vyas and Sang Ho Do, ST76:Aug 76:205

Fibers
Analysis of Reinforced Fibrous Concrete Beams, Charles H. Henager and Terrence J. Doherty, ST1: Jan 76:177:11847
Fiber Reinforced Concrete Extrusion, Ronald F. Zollo, ST12:Dec 75:2573:11798
Pavement Applications for Steel Fibrous Concrete, David R. Lankard and Alvin J. Walker, TE1:Feb 75:137:11108
Probabilistic Analysis of Fiber-Reinforced Concrete, Antoine E. Naaman, Fred Moavenzadeh and Frederick J. McGarry, EM2:Apr 74:397:10491

Field Investigations
Discrete Field Stability Analysis of Ribbed Plates, R. Richard Avent and Dieter Bounin, ST9:Sept 76:1917:12413
Field Measurements and Load Spectra of Highway Bridges, Conrad P. Heins, ST76:Aug 76:133
Oscillations in Harbors Containing Islands, Jiin-Jen Lee, OE75:June 75:632

Field Tests
Acquiring Traffic Data by In-Motion Weighing, R. B. Machemehl, Clyde E. Lee and C. Michael Walton, TE4:Nov 75:681:11716
Analysis of a Test Embankment Considering the Anisotropy of the Soil, Hakan Stille, A. Fredriksson and Bengt B. Broms, NMG:June 76:II-611
Assessment of Environmental Impact on the Aquatic Environment with Limited Field Data, Paul E. Flatt and Charles D.D. Howard, IR76:July 76:435
Behavior of Drilled Piers under Axial Loading, Lymon C. Reese, Fadlo T. Touma and Michael W. O'Neill, GT5:May 76:493:12135
Comparison of Numerical Schemes, John C. Bruch, Jr. and Roland W. Lewis, NMG:June 76:I-115
Concrete Pipe Culvert Behavior - Part 2, Raymond Eugene Davis and Alfred E. Bacher, ST3:Mar 74: 615:10408
Concrete Pipe Culvert Behavior—Part 1, Raymond Eugene Davis, Alfred E. Bacher and John C. Obermuller, ST3:Mar 74:599:10404
Deck Slab Repaired by Fibrous Concrete Overlay, Ernest K. Schrader and Anthony V. Munch, CO1: Mar 76:179:11976
Deformation of Deep Excavations, Dieter Stroh and Herbert Breth, NMG:June 76:II-686
Dynamic Environment Simulation by Pulse Techniques, Sami F. Masri and Frederick B. Safford, EM1:Feb 76:151:11923
Evaluation of Nonuniformity in Irrigation and Yield, Ivan Varlev, IR1:Mar 76:149:12003
Evaluation of Stress Cell Performance, Raymond J. Krizek, M. Hassan Farzin, Anwar E.Z. Wissa and R. Torrence Martin, GT12:Dec 74:1275:11030
FE Analysis of Soil Movements Below a Test Embankment, Toru Shibata, Masanari Tominaga and Hajime Matsuoka, NMG:June 76:II-599
Feedback from Field Studies of Hydraulic Dredges, David R. Basco, WW3:Aug 75:277:11526
Field Measurement of Permeability in Soil and Rock, Victor Milligan, GT75:June 75:II-3
Field Measurements and Load Spectra of Highway Bridges, Conrad P. Heins, ST76:Aug 76:133
Field Problems of Latticed Structures, Lev Zetlin, Joseph F. Thelen and Daniel A. Cuoco, ST11:Nov 75:2241:11711
Field Test Sections Save Cost in Tunnel Support, Kenneth S. Lane, FTTC:Oct 75
Guidance for Load Tests of Buildings, Neal FitzSimons and Anatole Longinow, ST7:July 75: 1367:11431
Influence of Equivalent Sand Roughness on the Dispersion Coefficient in Laboratory and Natural Streams, Ho-Shong Hou and Bent A. Christensen, WW76:Aug 76:1179
Lateral Earth Pressure at Rest in Soft Clay, K. Rainer Massarsch and Bengt B. Broms, GT10:Oct 76:1041:12476
Lower Granite Lock — Prototype Performance, George C. Richardson, WW76:Aug 76:1442
Maintenance Management Aids, Eugene L. Marvin, Preprint No.2637, Apr 76, 25pp.
Marine Sediment Pollution Study by Electric Conductivity Method, Mian-Chang Wang, David H. Killoy and Vito A. Nacci, Preprint No.2664, Apr 76, 19pp.
New and Conventional Engineering Uses of Fly Ash, Ramesh C. Joshi, Donald M. Duncan and Howard M. McMaster, TE4:Nov 75:791:11730
Polymer-Concrete Passes Toughest Test, Austin H. Emery and Meyer Steinberg, CE:June 76:61
Sediment-Water Interaction during Dredging Operations, John F. Sustar, Thomas H. Wakeman and Richard M. Ecker, DIEE:Jan 76:736
Service Load and Fatigue Tests on Truss Bridges, Hotten A. Elleby, Wallace W. Sanders, Jr., F. Wayne Klaiber and M. Douglas Reeves, ST12:Dec 76:2285:12625
Ultimate Load Test of Truss Bridge Floor System, Wallace W. Sanders, Jr., F. Wayne Klaiber, Hotten A. Elleby and Leonard W. Timm, ST7:July 76: 1383:12247
Underwater Placement of Sand Fill at Port of Portland Terminal #6, Loren R. Anderson and John Ramage, Preprint No.2718, Apr 76, 20pp.
Undrained Stress-Strain-Time Behavior of Clays, Jean-Herve Prevost, GT12:Dec 76:1245:12644
Vibratory In Situ and Laboratory Soil Moduli Compared, Robert W. Cunny and Zelma B. Fry, SM12:Dec 73:1055:10219

Filaments
Nonlinear Analysis of Unsymmetrically Laminated Plates, Samir A. Zaghloul and John B. Kennedy, EM3:June 75:169:11345

Fills
Experience in Using Dredge Material for Construction Purposes, Joseph H. Lamar and James E. Laier, DIEE:Jan 76:882
Impact of Dredge and Fill on Coastal Economic Development, Andrew A. Dzurik, DIEE:Jan 76:378

Filter Aids
Filter Fabrics: Growing Use in Road and Highway Construction, Eugene E. Dallaire, CE:May 76:61

Filter Materials
Determining Specific Deposit by Backwash Technique, Kou-ying Hsiung, EE2:Apr 74:353: 10449
Effect of Media Intermixing on Dual Media Filtration, John L. Cleasby and Gary D. Sejkora, EE4:Aug 75:503:11528
Filter Fabrics: Growing Use in Road and Highway Construction, Eugene E. Dallaire, CE:May 76:61
Plastic Filter Fabrics Have Bright Future, Richard N. Seemel, CE:Mar 76:57

Filters
Ambient Response Analysis of Some Tall Structures, George T. Taoka, Michael Hogan, Fazlur R. Khan and Robert H. Scanlan, ST1:Jan 75:49:11051
Design Optimization for Biological Filter Models, Harold B. Gotaas and William S. Galler, EE6:Dec 73:831:10191
Developments in Backwashing of Granular Filters, John L. Cleasby, Edward W. Stangl and Gary A. Rice, EE5:Oct 75:713:11642
Effect of Media Intermixing on Dual Media Filtration, John L. Cleasby and Gary D. Sejkora, EE4:Aug 75:503:11528
Evolutionary Spectra of Seismogram by Multifilter, Hiroyuki Kameda, EM6:Dec 75:787:11805
Intermittent Sand Filtration of Household Wastewater, David K. Sauer, William C. Boyle and Richard J. Otis, EE4:Aug 76:789:12295
Particles, Polymers, and Performance in Filtration, Mohammad T. Habibian and Charles R. O'Melia, EE4:Aug 75:567:11512
Plastic Filter Fabrics Have Bright Future, Richard N. Seemel, CE:Mar 76:57
Stability of Structures with Intermediate Filters, Amrik S. Chawla, HY2:Feb 75:223:11139
Upflow Filter for Potable Water Production, Ben J. Haney and Stephen E. Steimle, EE4:Aug 75:489: 11511

Filtration
Determining Specific Deposit by Backwash Technique, Kou-ying Hsiung, EE2:Apr 74:353: 10449
Developments in Backwashing of Granular Filters, John L. Cleasby, Edward W. Stangl and Gary A. Rice, EE5:Oct 75:713:11642
Effect of Media Intermixing on Dual Media Filtration, John L. Cleasby and Gary D. Sejkora, EE4:Aug 75:503:11528
Oxnard-Hueneme Pipeline, Operation and Water Quality Problems, Richard A. Smith, Preprint No.2683, Apr 76, 8pp.
Particles, Polymers, and Performance in Filtration, Mohammad T. Habibian and Charles R. O'Melia, EE4:Aug 75:567:11512

Physicochemical Approach to Water and Wastewater Filtration, Mriganka M. Ghosh, Thomas A. Jordan and Ronald L. Porter, EE1:Feb 75:71:11120
Upflow Filter for Potable Water Production, Ben J. Haney and Stephen E. Steimle, EE4:Aug 75:489:11511

Financial Analysis
Building Construction Management Game, Kenneth F. Reinschmidt, James W. Litchfield and Steven D. Hunt, EI2:Apr 75:117:11248
Future of Highways, Fiscal Constraints, Srikanth Rao, Thomas D. Larson and Theodore H. Poister, Preprint No.2768, Sept 76, 24pp.

Financial Responsibility
Inequities in Minority Engineer Education, Oswald Rendon-Herrero, EI4:Oct 75:499:11666

Financing
Highlights of San Diego Convention, CE:June 76:67
Horton Plaza Redevelopment Project—A Hope for Centre City San Diego, David N. Allsbrook, Preprint No.2730, Apr 76, 5pp.
Planning Criteria for Bikeways, Vincent R. Desimone, TE3:Aug 73:609:9928
Project Formulation in Today's World — Some Rural Development Dimensions, Graham F. Donaldson, IR76:July 76:700
Session VIII — Public Participation, Kenneth F. Rosanski, EFEEC:Aug 75:428

Fine Aggregates
Return of Fines from Commercial Dredging to the Ohio River, James C. North and John Clark, DIEE:Jan 76:593

Finite Difference Method
Analysis of Multilayer Plates on Elastic Pillars, Ashok K. Chugh, Hans Gesund and Fred D. Wright, ST11:Nov 75:2405:11738
Explicit Finite-Difference Methods in Geomechanics, Peter Cundall, NMG:June 76:I-132
Implicit Numerical Modeling of Unsteady Flows, Michael Amein and Hsiao-Ling Chu, HY6:June 75:717:11378
Inelastic Spatial Stability of Restrained Beam-Columns, Sriramulu Vinnakota and Pentti Aysto, ST11:Nov 74:2235:10919
A Numerical Model of the Time-Dependent, Three-Dimensional Structure of Circulation in Large Lakes, Ralph Ta-shun Cheng, Preprint No.2692, Apr 76, 27pp.
Solution for Unsteady Open Channel Flow, Fred D. Theurer, A. H. Barnes and Everett V. Richardson, WW76:Aug 76:1497

Finite Differences
Dynamic Relaxation Solution of Seepage Problems, Chandrakant J. Parekh, NMG:June 76:II-1133
Experiments for Accuracy and Stability of Heat Conduction, Rao Yalamanchili, NMG:June 76:I-93
Optimal Pumping for Aquifer Dewatering, Eduardo Aguado, Irwin Remson, Mary F. Pikul and Will A. Thomas, HY7:July 74:869:10639
Solutions for Unconfined Non-Darcy Seepage, Raymond E. Volker, IR1:Mar 75:53:11203

Finite Difference Theory
Instability in Tidal Flow Computational Schemes, T. John Weare, HY5:May 76:569:12100

Finite Element Method
The Aerospace Industry and the Civil Engineer, W. James King and Donald McDonald, Preprint No.2808, Sept 76, 20pp.
Analysis of a Test Embankment Considering the Anisotropy of the Soil, Hakan Stille, A. Fredriksson and Bengt B. Broms, NMG:June 76:II-611
Analysis of Buried Pipe Under Embankment, Shamsher Prakash, Gyan C. Nayak and R. Gupta, NMG:June 76:II-886
Analysis of Consolidation in Cores of Earth Dams, Zdenek Eisenstein, Addanki V.G. Krishnayya and Steven T.C. Law, NMG:June 76:II-1089
Approximate Solution for Unconfined Seepage, Chandrakant S. Desai, IR1:Mar 73:71:9607
Aspects of the Analysis of Gravity Offshore Structures, Ian M. Smith, NMG:June 76:II-957
Column Supported Cylindrical-Conical Tanks, Phillip L. Gould, Subir K. Sen, Robert S.C. Wang, Herman Suryoutomo and Richard D. Lowrey, ST2:Feb 76:429:11927
Comparison of Boundary Integral Equation and FE Methods, Shien T. Wang and George E. Blandford, TN: ST9:Sept 76:1941:12370
Computer Analysis of Segmentally Erected Bridges, Robert C. Brown, Jr. and Ned H. Burns, ST4:Apr 75:761:11218
Consideration of Finite Element Representation, H. Bolton Seed, STN75:Dec 75:II-246
Constitutive Relations for Concrete, Andrie C.T. Chen and Wai F. Chen, EM4:Aug 75:465:11529
Deformation of Deep Excavations, Dieter Stroh and Herbert Breth, NMG:June 76:II-686
Design Criteria for Anchor Cables and Bolting in Underground Openings, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:II-859
Elastic Analysis of Rectangular Box Girders by Finite Element Method, Cetin Yilmaz and Ben T. Yen, ST76:Aug 76:1023
Elasto-Plastic Finite Element Analyses of Sand Deformations, Yoshio Ozawa and James M. Duncan, NMG:June 76:I-243
Energy Absorbing Boundary for Anisotropic Material, Somasundaram Valliappan, Weeks White and Ian K. Lee, NMG:June 76:II-1013
Evaluation of Stress Cell Performance, Raymond J. Krizek, M. Hassan Farzin, Anwar E.Z. Wissa and R. Torrence Martin, GT12:Dec 74:1275:11030
FEM Coupled with LP for Water Pollution Control, Tanehiro Futagami, Nobuyuki Tamai and Mashio Yatsuzuka, HY7:July 76:881:12244
Finite Element Analyses of Arch Abutments, E. D'Appolonia, Donald E. Shaw, Jacques Richard and Daniel A. Raynaud, GT76:Aug 76:55
Finite Element Analysis of Cement Fill Exposures, John L. Meek and R. W. Kirkby, NMG:June 76:II-901
Finite Element Analysis of Grout Propagation, Manfred Wallner and Walter Wittke, NMG:June 76:II-1119
Finite Element Analysis of Large Deformation in Slopes, Nimitchai Snitbhan and Wai F. Chen, NMG:June 76:II-744
Finite Element Analysis of Linear Dynamic Behavior, John S. Archer, Preprint No.2765, Sept 76, 30pp.
Finite Element Analysis of Miyama Rockfill Dam, Tadatsugu Tanaka and Ryoki Nakano, NMG:June 76:II-650
Finite Element Analysis of Stresses and Movements in Excavations, Hiromitsu Izumi, Katsumi Kamemura and Seiichi Sato, NMG:June 76:II-701
Finite Element Model for Cohesive Sediment Transport, Ranjan Ariathurai and Ray B. Krone, HY3:Mar 76:323:11987
Finite Element Solution of Saint-Venant Equations, Richard L. Cooley and Syed Afaq Moin, HY6:June 76:759:12213
Finite Element Structural Analysis, An Overview, Richard H. Gallagher, Preprint No.2765, Sept 76, 28pp.
Finite Element Study of a Shallow Tunnel in Rock Exhibiting Clay-Induced Anisotropy, C. F. Lee and Kwan Y. Lo, NMG:June 76:II-834
Finite Element Technology for Predicting Nonlinear Behavior of Structures, Robert J. Melosh and F. Hatt, Preprint No.2765, Sept 76, 20pp.

Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities, E. D'Appolonia, H. Bolton Seed, Robert V. Whitman, Shih-Lung Chu, Carl J. Costantino, Asadour H. Hadjian, Izzat M. Idriss, John Lysmer, R. Scavuzzo and Milomir Stoykovich, SDNPF:Dec 73:III-19

Generalisation of Sequential Nonlinear Analysis: A Study of Rockfill Dam with Joint Elements, Heramb D. Sharma, Gyan C. Nayak and J. B. Maheshwari, NMG:June 76:II-662

General Panel — Summary of Presentations, John D. Stevenson, E. J. Keith, Nathan M. Newmark, R. E. Keever, Jack E. Cermak, H. Bolton Seed and M. J. Holley, SDNPF:Dec 73:III-81

Hydraulic Fracture and Heat Extraction from Hot Dry Rock Masses: A Finite Element Approach, S. Nemat-Nasser, Zdenek P. Bazant and H. Ohtsubo, NMG:June 76:I-79

Impact of CDC STAR-100 Computer on Finite Element Systems, Ahmed K. Noor and Robert E. Fulton, ST4:Apr 75:731:11216

Incremental Finite Element Matrices, Sundaramoorthy Rajasekaran and David W. Murray, ST12:Dec 73:2423:10226

Incremental Stress-Strain Relationship for Cohesionless Soil, F. Darve, S. Labanieh and R. Chambon, NMG:June 76:I-264

Integrated Study of Reinforced Earth—II: Behavior and Design, Chih-Kang Shen, Karl M. Romstad and Leonard R. Herrmann, GT6:June 76:577:12210

Iterative Improvement of Finite Element Approximations, Ranbir S. Sandhu, U. Salaam and K. J. Singh, NMG:June 76:I-104

Laterally Loaded Pipe Pile in Cohesionless Soil, Helmut E. Meissner, NMG:June 76:III-1353

Macroapproach for Ribbed and Grid Plate Systems, Hota V.S. GangaRao, Amr Abd Elmeged and Virendra K. Chaudhary, EM1:Feb 75:25:11130

Mica Dam Embankment Stress Analysis, Nigel A. Skermer, GT3:Mar 75:229:11162

Nonlinear Analyses in Soil and Solid Mechanics, Hugh L. Davidson and Wai F. Chen, NMG:June 76:I-205

Nonlinear Analysis of Foundation Vibrations, Mete Oner and Nilmar Janbu, NMG:June 76:II-1025

Nonlinear Characterization and Analysis of Sand, Hon-Yim Ko and Raymond M. Masson, NMG: June 76:I-294

Nonlinear Settlement Analysis by Finite Element, Leonard Domaschuk and Palaniappan Valliappan, GT7:July 75:601:11423

Nuclear Turbine-Generator Foundation Model Tests, Ish K. Aneja and Brian W. Dimmick, Preprint No.2704, Apr 76, 30pp.

Numerical Analysis of Thermal Crack Propagation in Pavement Overlays, H. S. Chang, Robert L. Lytton and S. H. Carpenter, NMG:June 76:I-526

Numerical Design-Analysis for Piles in Sands, Chandrakant S. Desai, GT6:June 74:613:10617

A Numerical Model of the Time-Dependent, Three-Dimensional Structure of Circulation in Large Lakes, Ralph Ta-shun Cheng, Preprint No.2692, Apr 76, 27pp.

Post-Tensioned Slab Bridges on Isolated Supports, Roger Green, ST1:Jan 75:233:11065

Review of Selected Topics in Finite Element Analysis, Robert D. Cook, ST76:Aug 76:535

Rock Squeeze Study of Two Deep Excavations at Niagara Falls, C. F. Lee and Kwan Y. Lo, GT76: Aug 76:116

Seismic SSI of Nuclear Power Plant Structures, Izzat M. Idriss and Khosrow Sadigh, GT7:July 76:663: 12246

Soil Island Approach to Structure/Media Interaction, Ivan Nelson and Jeremy Isenberg, NMG:June 76:I-41

Soil-Structure Interaction Analyses for Seismic Response, H. Bolton Seed, John Lysmer and Richard N. Hwang, GT5:May 75:439:11318

Some Finite Element Solutions in the Dynamics of Circular Footings, S. P. Dasgupta and N. S.V. Kameswara Rao, NMG:June 76:II-1038

Sparse Matrix Operations in Finite Element Analysis, Caleb W. McCormick, Preprint No.2765, Sept 76, 20pp.

Stress and Stability Analyses of Underground Openings Taking Post-Failure Behavior of Rock into Consideration, T. Kawamoto and T. Saito, NMG:June 76:II-791

Synthesis of Finite Element Analysis of Culverts, John F. Abel and James Neil Kay, NMG:June 76: II-873

Thermoelastic/Plastic Analysis in Rock Mechanics, William G. Pariseau, NMG:June 76:II-1168

Transient Hydrothermal Analysis of Small Lakes, Lawrence A. Loziuk, James C. Anderson and Ted B. Belytschko, PO2:Nov 73:349:10150

Truncation Error Control in Generalized Finite Element Method, Martin J. Wyatt, Gwynne Davies and Cyril Snell, TN: EM4:Aug 76:736:12286

Variational Principles for Finite Element Analysis of Consolidation, Ranbir S. Sandhu, NMG:June 76:I-20

Viscoelastic Analysis About Deformation of Weak Ground, Tomoyuki Akagi, Yoshinori Ito and Makoto Irobe, NMG:June 76:II-639

3-D Analysis of Laterally Loaded Structures, Chandrakant S. Desai and G. C. Appel, Jr., NMG: June 76:I-405

3-D Finite Element Analysis of a Dam Foundation, Walter Wittke and Stephen Semprich, NMG:June 76:III-1385

3-D Stability Analysis of Tunnels in Jointed Rock, Walter Wittke and Bernd Pierau, NMG:June 76:III-1401

Finite Elements

Acoustic Radiation of Submerged Vibrating Structures, Robert R. Smith and John T. Hunt, Preprint No.2711, Apr 76, 16pp.

Analysis of Pressuremeter in Strain-Softening Soil, Jean-Herve Prevost and Kaare Hoeg, GT8:Aug 75: 717:11488

Analysis of Shear-Induced Anisotropy in Leda Clay, K. T. Law and Kwan Y. Lo, NMG:June 76:I-329

Anisotropy for Finite Element Analysis, Ravikumar Bhaskaran, NMG:June 76:I-345

Application of Finite Element Method to Open Channel Flow, Date H. Keuning, HY4:Apr 76:459: 12053

Avoidance of Parasitic Shear in Plane Element, Robert D. Cook, ST6:June 75:1239:11370

Beam Analog for Plate Elements, M. Ezzat Mohsin and Edward E. Sadek, ST1:Jan 76:125:11844

Calculation of Raft Foundations on Clayey Silts, Quirin Laumans and Hermann Schad, NMG:June 76:I-475

Consideration of Finite Element Representation, H. Bolton Seed, STN75:Dec 75:II-246

Consideration of Other Techniques, Robert V. Whitman, STN75:Dec 75:II-257

Consolidation Settlement of a Layered Subsurface, Surendra K. Saxena and Chandrakant S. Desai, NMG:June 76:III-1419

Coupled Shear Wall Analysis by Lagrange Multipliers, Riadh S. Al-Mahaidi and Arthur H. Nilson, ST11:Nov 75:2359:11732

Distribution of Subgrade Reaction Using Substructuring Finite Element Methods, Satyananda Chakrabarti, Nishikant R. Vaidya and Donald E. Shaw, NMG:June 76:I-551

Dynamic Finite Element Modeling of Near Field from San Fernando 1971 Earthquake, Samuel T. Harding and David Perkins, NMG:June 76:II-955

Dynamic Response of Membranes with Finite Elements, Steven E. Benzley and Samuel W. Key, EM3:June 76:447:12217

Earthquake Finite Element Analysis of Structure-Foundation Systems, Ashok K. Vaish and Anil K. Chopra, EM6:Dec 74:1101:10990

Efficient Finite Element Analysis of Seismic Structure-Soil-Structure Interaction, John Lysmer, H. Bolton Seed, T. Udaka, Richard N. Hwang and C.-F. Tsai, STN75:Dec 75:II-125

Energy Approach to Inelastic Cable-Structure Analysis, Giulio Maier and Roberto Contro, EM5: Oct 75:531:11614
Experiments for Accuracy and Stability of Heat Conduction, Rao Yalamanchili, NMG:June 76:I-93
Finite Element Analysis of Doubly Corrugated Shells, Herbert A. Mang, C. V. Girya Vallabhan and Jimmy H. Smith, ST10:Oct 76:2033:12482
Finite Element Analysis of Layered Wood Systems, Erik G. Thompson, James R. Goodman and M. Daniel Vanderbilt, ST12:Dec 75:2659:11802
Finite Element Analysis of Piles in Viscoelastic Soil, John R. Booker and Harry G. Poulos, NMG:June 76:I-425
Finite Element Analysis of Piles in Expansive Media, Joram M. Amir and M. Sokolov, GT7:July 76:701:12256
Full Range Analysis of Eccentrically Stiffened Plates, Anton W. Wegmuller, ST1:Jan 74:143:10286
Hydraulic Fracture and Heat Extraction from Hot Dry Rock Masses: A Finite Element Approach, S. Nemat-Nasser, Zdenek P. Bazant and H. Ohtsubo, NMG:June 76:I-79
Improved Two-Dimensional Finite Element, Robert D. Cook, ST9:Sept 74:1851:10808
Lessons Learned in Finite Element Analyses of Temporary Excavations in Soft Clay, G. Wayne Clough and Abdulaziz I. Mana, NMG:June 76:I-496
Nonlinear Analysis of Earth Structures, W. D. Liam Finn and Ronald Ian S. Miller, NMG:June 76:I-194
Nonlinear Analysis of RC Shells of General Form, Cheng-Shung Lin and Alexander C. Scordelis, ST3: Mar 75:523:11164
Non-Linear Elastic Approximations of the Behaviour of Soils, Arnold Verruijt, NMG:June 76:III-1321
Numerical Analysis of Embankments over Soft Soils, Robert L. Thoms, Richard A. Pecquet and Ara Arman, NMG:June 76:II-623
On Load Tests in Soft Clays, Bernd R. Thamm, NMG:June 76:I-557
Quadratic Finite Elements in Shallow Water Problems, Paul W. Partridge and Carlos A. Brebbia, HY9:Sept 76:1299:12418
Rectangular Finite Element for Field Problems, Bruce W. Golley, EM3:June 76:431:12175
Sensitivity of Estuarine Circulation Model, John D. Wang, OE75:June 75:1035
Session 6: Soil Structure Interaction — Design and Analysis, Asadour H. Hadjian, STN75:Dec 75:II-191
Session 6: Soil Structure Interaction — Finite Element, Lumped Parameter, John R. Hall, Jr., STN75:Dec 75:II-206
Shear Stresses in Beams with Discontinuity in Depth, John Marshall and Ravindra P. Jategaonkar, ST7: July 75:1393:11424
Stress Analysis of Strain-Softening Materials, Stein Sture and Hon-Yim Ko, NMG:June 76:I-580
Survey of Structural Reanalysis Techniques, Jasbir S. Arora, ST4:Apr 76:783:12056
Tapered Plane Stress Annular Sector Finite Element, Victor A. Pulmano, EM4:Aug 75:349:11498
Thick Plates on Elastic Foundations by Finite Elements, Otto J. Svec, EM3:June 76:461:12215

Fire Control
How Concerned Should Civil Engineers be with Fire Protection?, Virginia Fairweather, CE:Mar 75:57

Fire Hazards
Control of Gas Flow from Sanitary Landfills, Houshang Esmaili, EE4:Aug 75:555:11525

Fire Prevention
Kansas City Bank Tower Features Water-Filled Columns, Exposed Spandrels, CE:Jan 76:58

Fire Protection
Effects of Elevated Temperature on Structural Members, Tasnim Uddin and Charles G. Culver, ST7:July 75:1531:11440
Heating Calculation of Structural Steel Members, Bernard Barthelemy, ST8:Aug 76:1549:12303
How Concerned Should Civil Engineers be with Fire Protection?, Virginia Fairweather, CE:Mar 75:57
La Guardia Airport Parking and Terminal Frontage Structure, Eugene J. Fasullo, CE:Mar 76:53
New Era in Fire Protective Coatings for Steel, William A. Rains, CE:Sept 76:80
Performance Requirements for Fireproofing Materials, Lawrence G. Seigel, EM3:June 74:489: 10598
Probability of Failure of Building from Fire, Raymond H. Burros, ST9:Sept 75:1947:11567

Fire Resistance
Heating Calculation of Structural Steel Members, Bernard Barthelemy, ST8:Aug 76:1549:12303
Structural Fire Resistance of Concrete, Eduardo Salse and Tung D. Lin, ST1:Jan 76:51:11835

Fire Resistant Coatings
New Era in Fire Protective Coatings for Steel, William A. Rains, CE:Sept 76:80

Fire Resistant Materials
New Era in Fire Protective Coatings for Steel, William A. Rains, CE:Sept 76:80

Fires
Computer Analysis of Steel Frame in Fire, Wun-Chau Cheng and Cary K. Mak, ST4:Apr 75:854: 11262
Effects of Elevated Temperature on Structural Members, Tasnim Uddin and Charles G. Culver, ST7:July 75:1531:11440
Engineering Risk Management of Natural and Man-Made Hazards, Larry T. Lee and Jon D. Collins, Preprint No.2757, Sept 76, 30pp.
How Concerned Should Civil Engineers be with Fire Protection?, Virginia Fairweather, CE:Mar 75:57
Probability of Failure of Building from Fire, Raymond H. Burros, ST9:Sept 75:1947:11567

Fire Safety
ASCE Tackles Standards, CE:Aug 76:64
How Concerned Should Civil Engineers be with Fire Protection?, Virginia Fairweather, CE:Mar 75:57

Fire Tests
Structural Fire Resistance of Concrete, Eduardo Salse and Tung D. Lin, ST1:Jan 76:51:11835

Fish
Fish Impingement at Monticello Nuclear Plant, Laurence M. Grotbeck and James L. Bechthold, PO1:July 75:69:11409

Fish Barriers
Perforated-Pipe Water Intake for Fish Protection, Richard T. Richards and Mark J. Hroncich, HY2: Feb 76:139:11900

Fish Behavior
Effects of Destratification on Depth Distribution of Fish, Glen E. Gebhart and Robert C. Summerfelt, EE6:Dec 76:1215:12608

Fish Conservation
Protection and Enhancement of Fisheries and Wildlife Resources, F. Eugene Hester, IR76:July 76:690

Fish Handling Facilities
Improved Fish Protection at Intake Systems, Victor J. Schuler and Lory E. Larson, EE6:Dec 75:897: 11756

Fishkill
Fish Impingement at Monticello Nuclear Plant, Laurence M. Grotbeck and James L. Bechthold, PO1:July 75:69:11409
Simple Flume for Guidance and Impingement Studies, James L. Congleton and Ronald D. Mayo, PO1:July 75:35:11416

Fish Management
Simulation of Future River Fluctuations, Douglas D. Speers, WW76:Aug 76:608

Fish Screens
Gabions, Perforated Pipe and Gravel Serve as Fish Screens, Reuben E. Schmidt and Kenneth R. McSwain, CE:May 76:73
Perforated-Pipe Water Intake for Fish Protection, Richard T. Richards and Mark J. Hroncich, HY2: Feb 76:139:11900
Simple Flume for Guidance and Impingement Studies, James L. Congleton and Ronald D. Mayo, PO1:July 75:35:11416

Fishways
Improved Fish Protection at Intake Systems, Victor J. Schuler and Lory E. Larson, EE6:Dec 75:897: 11756
Shaft Failure of Large Axial Flow Pumps, Christopher A. Gardner and Howard T. Hill, PO2: Nov 76:209:12575
Simple Flume for Guidance and Impingement Studies, James L. Congleton and Ronald D. Mayo, PO1:July 75:35:11416

Fjords
Applications of Mixing Experiments to Estuaries, Robert R. Long, OE75:June 75:1400

Flanges
High Strength Bolts Subject to Tension and Prying, R. Shankaran Nair, Peter C. Birkemoe and William H. Munse, ST2:Feb 74:351:10373

Flash Floods
Identifying Urban Flash Flooding Problems, William P. Darby and Mitchell J. Small, WR2:Nov 76:349: 12571

Flat Plates
Single Element Panel for Flat Plate Structures, Sid French, Algis P. Kabaila and Victor A. Pulmano, ST9:Sept 75:1801:11553

Flexibility
Shear of Light-Gage Partitions in Tall Buildings, Wagih M. El-Dakhakhni, ST7:July 76:1431:12257
Static and Dynamic Flexibility Matrix for a Semi-Infinite Solid, Tarun R. Naik and Chu-Kia Wang, ST76:Aug 76:644

Flexibility Methods
Macroapproach for Ribbed and Grid Plate Systems, Hota V.S. GangaRao, Amr Abd Elmeged and Virendra K. Chaudhary, EM1:Feb 75:25:11130
Static and Dynamic Flexibility Matrix for a Semi-Infinite Solid, Tarun R. Naik and Chu-Kia Wang, ST76:Aug 76:644

Flexible Foundations
Large Flexible Turbine Foundations, Amin M. Almuti, T76:Aug 76:707

Flexible Pavements
Cumulative Deflection and Pavement Performance, William H. Highter and Milton E. Harr, TE3:Aug 75:537:11507
Economics of Preventive Highway Maintenance, LaRue E. Delp, CE:Dec 76:43
Fracture of Pavement Materials, Geoffrey E. Blight, TE4:Nov 73:801:10139
Hydrology of Porous Pavement Parking Lots, Thomas J. Jackson and Robert M. Ragan, HY12: Dec 74:1739:11010
Migration of Subgrade Salts Damages Thin Pavements, Geoffrey E. Blight, TE4:Nov 76:779: 12542
Need for Estimated Cement Requirements for Stabilizing Lateritic Soils, Samuel A. Ola, TE2:May 74:379:10534
Response of Flexible Pavements to Multiple Loads, Yu Tang Chou, Ronald L. Hutchinson and Harry H. Ulery, Jr., TE2:May 75:247:11307
Runway Rebuilding with Daily Use, Grant S. Anderson and Kenneth T. Giles, CE:Mar 75:78
Rutting Failure in Full-Depth Asphalt Pavement, Jacob Greenstein and Moshe Livneh, TE4:Nov 75: 737:11690
Structural Analysis of Flexible Airfield Pavements, Richard G. Ahlvin, Yu Tang Chou and Ronald L. Hutchinson, TE3:Aug 74:625:10727
Sulfur-Asphalt Mixtures Using Poorly Graded Sands, Don Saylak, Bob M. Gallaway, Jon A. Epps and Haffizudin Ahmid, TE1:Feb 75:97:11106

Flexural Strength
Torsion and Flexure of Closed Thin-Walled Beams, Ray N. Nitzsche and Robert E. Miller, TN: EM1: Feb 76:189:11884

Floating Bodies
Design Forces for Offshore Nuclear Power Plant Construction, Joseph A. Fischer, Ian Watson, Harcharan Singh, T. D. Lu, Surendra K. Saxena, Demetrious Koutsoftas and Lloyd E. Stahl, OE75: June 75:1
Floating Nuclear Plants and Offshore Energy Centers, Thomas J. DiClemente, OE75:June 75:29
German Design of Floating Concrete Structures, Richard Heinen, Preprint No.2735, Apr 76, 22pp.
Oceanographic Survey in Support of FNPP-AGS Site, Lloyd F. Lewis, OE75:June 75:9
On Green's Function Techniques for Solutions of Floating Body Problems, Rong-Tai Ho and Ami Harten, OE75:June 75:939
Three Dimensional Seismic Analysis for a Floating Nuclear Plant Using Finite Element Procedures, Harry W. Johnson, Ashok K. Vaish and Frank L. Porter, Preprint No.2700, Apr 76, 23pp.

Floating Docks
Floating Dry Dock Doubles as Launching Platform, Paul S. Crandall, CE:May 75:74

Floats
Float Calibration in Intergrated-Float Techniques, Peter H. John, F. Allan Johnson and Peter Sutcliffe, HY8:Aug 76:1071:12308

Flocculating
Column Settling Tests for Flocculant Suspensions, Alphonse E. Zanoni and Marshall W. Blomquist, EE3:June 75:309:11356
Transport Phenomena Applied to Sludge Dewatering, Peter Kos and Donald Dean Adrian, EE6:Dec 75: 947:11781

Flocculation
Optimizing Flocculator Power Input, Rafael Andreu-Villegas and Raymond D. Letterman, EE2:Apr 76: 251:12032
Particles, Polymers, and Performance in Filtration, Mohammad T. Habibian and Charles R. O'Melia, EE4:Aug 75:567:11512
Pore and Eroding Fluid Influences on Surface Erosion on Soil, Kandiah Arulanandan, Paripurnanandan Loganathan and Ray B. Krone, GT1:Jan 75:51:11078
What's New in Water Treatment?, Virginia Fairweather, CE:Sept 75:69

Flood Control
Adapting Flood Control Projects for Environmental Compatibility, John M. Tettemer and Harold A. Vance, IR76:July 76:315
Agricultural Benefit Assessment from Flood Control, Krishan P. Singh, IR76:July 76:264
Analysis of Offshore Concrete Caisson Dikes under Cyclic Loading, John T. Christian and Jean M.E. Audibert, NMG:June 76:II-979
Autogeometry of Semi-Arid Channel Systems, John Barrie Thornes, WW76:Aug 76:1715
Computer Modeling of Erodible Flood Channels and Deltas, Howard H. Chang and Joseph C. Hill, HY10:Oct 76:1461:12485

Dealing with Variable Flood Hazard, Jerry A. McCrory, L. Douglas James and D. Earl Jones, Jr., WR2:Nov 76:193:12522
Development of Storm Drainage Cost Functions, Neil S. Grigg and John P. O'Hearn, HY4:Apr 76: 515:12069
Development of the Water Resources in the Tennessee Valley Region, Bevan W. Brown, Jr., Preprint No.2799, Sept 76, 22pp.
Disaster-Caused Increases in Construction Costs, Thomas N. Yancey, Jr., James L. Douglas and D. Earl Jones, Jr., CE:Sept 76:94
Disaster Caused Increases in Unit Repair Cost, Thomas N. Yancey, Jr., L. Douglas James, D. Earl Jones, Jr. and Jeanne Goedert, WR2:Nov 76:265: 12564
Emergency Assistance on Flood Damage in North Dakota Under Section 216 of the Flood Control Act of 1950, A. Richard Moum, IR76:July 76:76
Emergency Protection for Flood Damaged Streams, Donald W. Shanklin, IR76:July 76:85
Engineers and Public Participation in Water Resources Development, Edward Silberman, Preprint No.2668, Apr 76, 22pp.
Environmental Aspects—Sacramento Bank Protection, Charles S. Mifkovic and Margaret S. Petersen, HY5:May 75:543:11326
Evaluation and Implementation of Urban Drainage Projects, Neil S. Grigg, UP1:May 75:61:11324
Extreme Roughness of Natural River Channel, Hans J. Leutheusser and W. Orville Chisholm, HY7:July 73:1027:9831
Fifty-Year Development of Upstream Flood-Control Works Construction, Charlie M. Moore, CO3:Sept 75:477:11543
Flood Control Arrangements for River Junctions, Mostafa M. Soliman, WW76:Aug 76:1057
Flood Control for an Island Sited Nuclear Plant, Joel L. Caves, WW76:Aug 76:872
Flood Control in the Province of the Punjab (Pakistan), S. M. Ayoob and Wali Muhammad Choudhry, WW76:Aug 76:1071
Flood Damage Reduction Potential of River Forecast, Harold John Day and Kwang K. Lee, WR1:Apr 76:77:12059
Identifying Urban Flash Flooding Problems, William P. Darby and Mitchell J. Small, WR2:Nov 76:349: 12571
Inflatable Dam Regulates River Level, Robert A. Gunnerson, CE:Feb 76:83
Integrated River System Operation in a Major Flood, Alfred J. Cooper and Clifford A. Roberts, PO1:Jan 76:63:11825
Levee System Reliability Along a Confluence Reach, Ferenc Szidarovsky, Lucien Duckstein and Istvan Bogardi, EM5:Oct 75:609:11621
Management of Connecticut River Flood Problems, S. Lawrence Dingman, WW76:Aug 76:832
The Miami Conservancy District — A Study in Self Help, L. Bennett Coy, Preprint No.2747, Sept 76, 11pp.
Monetary Values of Life and Health, Bob Buehler, HY1:Jan 75:29:11047
Nebraska Flood-Plain Management Program—Part I, Albert E. Mathews, HY7:July 75:977:11437
Nebraska Flood-Plain Management Program—Part II, James R. Cook, HY7:July 75:983:11438
Nonstructural Flood Control — A Case Study, Rex A. Burns and David H. Pilgrim, WW76:Aug 76:552
Non-Structural Flood Control in Rivers Flowing in Their Alluvions, Fuat Senturk, WW76:Aug 76:1199
Optimal Sizing of Urban Flood-Control Systems, Darryl W. Davis, HY8:Aug 75:1077:11490
Rainfall Temporal Patterns for Design Floods, David H. Pilgrim and Ian Cordery, HY1:Jan 75:81:11057
The Recycling of a River, Kenneth R. Wright and William C. Taggart, CE:Nov 76:42
River Basin Model for Simulating Flood Control Alternatives, Norbert L. Ackermann and Hiro Shigai, WW76:Aug 76:348
River Response to Development, Everett V. Richardson and Daryl B. Simons, WW76:Aug 76: 1285
Social Aspects of Planning, Gene E. Willeke, Preprint No.2754, Sept 76, 22pp.
Spatial Data Analysis of Nonstructural Measures, R. P. Webb and M. W. Burnham, WW76:Aug 76:329
Tentative Program for the Solution of the Sula Valley Flood Problem, Ricardo Alduvin A., WW76:Aug 76:892
Thames Barrier Project, P. A. Cox, P. J. Clark and G. Miller-Richards, WW76:Aug 76:852
Turbidity-Suspended Solids in Channel Construction, James L. Hunt and John J. Mank, Preprint No.2794, Sept 76, 15pp.
Upstream Flood Lowering in Reservoirs, Bob Buehler, HY2:Feb 76:151:11911
Water Resources Planning — Historical Development, Theodore M. Schad, Preprint No.2754, Sept 76, 22pp.

Flood Damage

Dealing with Variable Flood Hazard, Jerry A. McCrory, L. Douglas James and D. Earl Jones, Jr., WR2:Nov 76:193:12522
Disaster-Caused Increases in Construction Costs, Thomas N. Yancey, Jr., James L. Douglas and D. Earl Jones, Jr., CE:Sept 76:94
Disaster Caused Increases in Unit Repair Cost, Thomas N. Yancey, Jr., L. Douglas James, D. Earl Jones, Jr. and Jeanne Goedert, WR2:Nov 76:265: 12564
Emergency Assistance on Flood Damage in North Dakota Under Section 216 of the Flood Control Act of 1950, A. Richard Moum, IR76:July 76:76
Emergency Protection for Flood Damaged Streams, Donald W. Shanklin, IR76:July 76:85
Flood Control in the Province of the Punjab (Pakistan), S. M. Ayoob and Wali Muhammad Choudhry, WW76:Aug 76:1071
Flood Damage Reduction Potential of River Forecast, Harold John Day and Kwang K. Lee, WR1:Apr 76:77:12059
Flood-Hazard Effects on Residential Property Values, Leonard A. Shabman and Demetrios I. Damianos, WR1:Apr 76:151:12065
Impact of Flooding on Land Transfer Prices, Wayne E. Boyet, Kenneth W. Hollman and Wayne L. Sterling, WW76:Aug 76:127
Management of Connecticut River Flood Problems, S. Lawrence Dingman, WW76:Aug 76:832
Spatial Data Analysis of Nonstructural Measures, R. P. Webb and M. W. Burnham, WW76:Aug 76:329
Tentative Program for the Solution of the Sula Valley Flood Problem, Ricardo Alduvin A., WW76:Aug 76:892

Flood Estimate

Quantitative Assessment of Changes in Urban Runoff, Irina Cech and Karen Assaf, IR1:Mar 76: 119:11957
Simple Nonlinear Model for Flood Estimation, Russell G. Mein, Eric M. Laurenson and Thomas A. McMahon, HY11:Nov 74:1507:10933

Flood Forecasting

Flood Estimation from Short Records, Walter C. Boughton, HY3:Mar 76:241:11996
Floods Predicted From Rainfall Frequencies, Lee Robinson and Theodore T. Williams, HY10:Oct 72: 1773:9294

Flood Frequency

Flood Estimation from Short Records, Walter C. Boughton, HY3:Mar 76:241:11996
Floods Predicted From Rainfall Frequencies, Lee Robinson and Theodore T. Williams, HY10:Oct 72: 1773:9294
Multivariable Flood Level Frequency Distribution, David L. Strelchuk, HY12:Dec 76:1737:12637
Study of Artificial Cutoffs on Gravel-Bed Rivers, Dale I. Bray and Andrew J. Cullen, WW76:Aug 76: 1399

Flooding

Autogeometry of Semi-Arid Channel Systems, John Barrie Thornes, WW76:Aug 76:1715

Channelization of River Bhargavi, India, Bishnu P. Das, WW76:Aug 76:1700
Control of High Velocity Flow Into a Tidal Basin, Alex Sheydayi, WW76:Aug 76:999
Design Basis Flooding at Offshore Reactor Sites, Ronald M. Noble, OE75:June 75:89
Detrimental Effects of River Channelization, Gary Parker and David Andres, WW76:Aug 76:1248
Flood Control Arrangements for River Junctions, Mostafa M. Soliman, WW76:Aug 76:1057
Flood Control in the Province of the Punjab (Pakistan), S. M. Ayoob and Wali Muhammad Choudhry, WW76:Aug 76:1071
Flood Peaks in Southern California Desert Areas, George E. Ribble, WW76:Aug 76:1094
Flood Routing Through River Junctions, Ben Chie Yen and A. Osman Akan, WW76:Aug 76:212
Highway Fill — A Broad-Crested Weir, Beverly M. Johnson, CE:Oct 76:60
Hydraulic Modeling Techniques in a Backwater Area, Phil G. Combs, Nolan K. Raphelt and James E. Foster, WW76:Aug 76:232
Impact of Flooding on Land Transfer Prices, Wayne E. Boyet, Kenneth W. Hollman and Wayne L. Sterling, WW76:Aug 76:127
Non-Structural Flood Control in Rivers Flowing in Their Alluvions, Fuat Senturk, WW76:Aug 76:1199
Spillway Modification to Reduce Gas Supersaturation, Peter M. Smith, WW76:Aug 76:667
Tentative Program for the Solution of the Sula Valley Flood Problem, Ricardo Alduvin A., WW76:Aug 76:892
Thames Barrier Project, P. A. Cox, P. J. Clark and G. Miller-Richards, WW76:Aug 76:852

Flood Peaks

Runoff Files for Flood Hydrograph Simulation, Alan M. Lumb and L. Douglas James, HY10:Oct 76:1515:12499

Flood Plain Insurance

Dealing with Variable Flood Hazard, Jerry A. McCrory, L. Douglas James and D. Earl Jones, Jr., WR2:Nov 76:193:12522
Economics of Permanent Flood-Plain Evacuation, Nolan L. Johnson, Jr., IR3:Sept 76:273:12378
Management of Connecticut River Flood Problems, S. Lawrence Dingman, WW76:Aug 76:832

Flood Plain Regulation

Dealing with Variable Flood Hazard, Jerry A. McCrory, L. Douglas James and D. Earl Jones, Jr., WR2:Nov 76:193:12522
Land Use and Flood Management, Kenneth R. Wright and Ruth M. Wright, WW76:Aug 76:147
Nonstructural Flood Control — A Case Study, Rex A. Burns and David H. Pilgrim, WW76:Aug 76:552
Project Formulation: Economic and Financial Aspects, Gary D. Cobb, IR76:July 76:660
The Recycling of a River, Kenneth R. Wright and William C. Taggart, CE:Nov 76:42

Flood Plains

Boundary Shear in Channel with Flood Plain, Robert C. Myers and Elsayed M. Elsawy, HY7:July 75:933:11452
Detrimental Effects of River Channelization, Gary Parker and David Andres, WW76:Aug 76:1248
Economics of Permanent Flood-Plain Evacuation, Nolan L. Johnson, Jr., IR3:Sept 76:273:12378
Flood Control in the Province of the Punjab (Pakistan), S. M. Ayoob and Wali Muhammad Choudhry, WW76:Aug 76:1071
Flood Routing in Meandering Rivers with Flood Plains, Danny L. Fread, WW76:Aug 76:16
Hydraulics of Sheet Flow in Wetlands, Bent A. Christensen, WW76:Aug 76:746
Impact of Flooding on Land Transfer Prices, Wayne E. Boyet, Kenneth W. Hollman and Wayne L. Sterling, WW76:Aug 76:127
Mathematical Modelling of Rivers with Flood Plains, Miodrag Radojkovic, WW76:Aug 76:56
Nebraska Flood-Plain Management Program—Part I, Albert E. Mathews, HY7:July 75:977:11437

Flood Plain Studies

Effects of Overbank Flow in Flood Computations, Tawatchai Tingsanchali and Norbert L. Ackermann, HY7:July 76:1013:12266
Flood Control in the Province of the Punjab (Pakistan), S. M. Ayoob and Wali Muhammad Choudhry, WW76:Aug 76:1071
Mathematical Modelling of Rivers with Flood Plains, Miodrag Radojkovic, WW76:Aug 76:56
Quantitative Assessment of Changes in Urban Runoff, Irina Cech and Karen Assaf, IR1:Mar 76:119:11957

Floodproofing

Flood Proofing Regulations for Building Codes, Armando C. Lardieri, HY9:Sept 75:1155:11576

Flood Protection

Emergency Protection for Flood Damaged Streams, Donald W. Shanklin, IR76:July 76:85
Flood Control Arrangements for River Junctions, Mostafa M. Soliman, WW76:Aug 76:1057
Flood Control for an Island Sited Nuclear Plant, Joel L. Caves, WW76:Aug 76:872
Flood Protection of Crystal River Unit 3 Nuclear Plant, Ronald M. Noble and Bert Simpson, PO1:July 75:85:11458
Management of Connecticut River Flood Problems, S. Lawrence Dingman, WW76:Aug 76:832
Non-Structural Flood Control in Rivers Flowing in Their Alluvions, Fuat Senturk, WW76:Aug 76:1199
Spatial Data Analysis of Nonstructural Measures, R. P. Webb and M. W. Burnham, WW76:Aug 76:329
Turbidity-Suspended Solids in Channel Construction, James L. Hunt and John J. Mank, Preprint No.2794, Sept 76, 15pp.

Flood Routing

Comparison of Four Numerical Methods for Flood Routing, Roland K. Price, HY7:July 74:879:10659
Flood Routing in Meandering Rivers with Flood Plains, Danny L. Fread, WW76:Aug 76:16
Flood Routing in the System of Free Surface Tunnels, Cedo Maksimovic and Miodrag Radojkovic, WW76:Aug 76:190
Flood Routing Through a Balancing Lake, Elsayed M. Elsawy and Toney Edgeley, WW76:Aug 76:1039
Flood Routing Through River Junctions, Ben Chie Yen and A. Osman Akan, WW76:Aug 76:212
Multiple Linearization Flow Routing Model, Thomas N. Keefer and Raul S. McQuivey, HY7:July 74:1031:10668
On Kinematic Wave Approximation for Flood Routing, Ruh-Ming Li, Daryl B. Simons, Larry S. Shiao and Yung H. Chen, WW76:Aug 76:377
Optimal River Cross Sections for Flood Routing, V. Seetharama Rao, Dinshaw N. Contractor and Chinchai Tiyamani, WW76:Aug 76:421
Two Dam Break Routing Models, Thomas N. Keefer and Raul S. McQuivey, WW76:Aug 76:201

Floods

Analysis of Flow through Vegetation, Sylvester Petryk, HY7:July 75:871:11457
Autogeometry of Semi-Arid Channel Systems, John Barrie Thornes, WW76:Aug 76:1715
Comparison of Four Numerical Methods for Flood Routing, Roland K. Price, HY7:July 74:879:10659
Conditional Expected Tsunami Inundation for Hawaii, Wm. Mansfield Adams, WW4:Nov 75:319:11702
Dam Safety — Texas Style, Joe D. Carter, EFRLD:Sept 75:79
Dams in Relation to Balanced Public Safety, Bob Buehler, EFRLD:Sept 75:27
Dimensionless Solution of Dam-Break Flood Waves, John G. Sakkas and Theodor Strelkoff, HY2:Feb 76:171:11910

Disaster-Caused Increases in Construction Costs, Thomas N. Yancey, Jr., James L. Douglas and D. Earl Jones, Jr., CE:Sept 76:94
Engineering Risk Management of Natural and Man-Made Hazards, Larry T. Lee and Jon D. Collins, Preprint No.2757, Sept 76, 30pp.
Finite Element Solution of Saint-Venant Equations, Richard L. Cooley and Syed Afaq Moin, HY6:June 76:759:12213
Flood Control Arrangements for River Junctions, Mostafa M. Soliman, WW76:Aug 76:1057
Flood Control in the Province of the Punjab (Pakistan), S. M. Ayoob and Wali Muhammad Choudhry, WW76:Aug 76:1071
Flood Estimation from Short Records, Walter C. Boughton, HY3:Mar 76:241:11996
Flood-Hazard Effects on Residential Property Values, Leonard A. Shabman and Demetrios I. Damianos, WR1:Apr 76:151:12065
Flood Peaks in Southern California Desert Areas, George E. Ribble, WW76:Aug 76:1094
Flood Routing Through River Junctions, Ben Chie Yen and A. Osman Akan, WW76:Aug 76:212
Floods Predicted From Rainfall Frequencies, Lee Robinson and Theodore T. Williams, HY10:Oct 72:1773:9294
Integrated River System Operation in a Major Flood, Alfred J. Cooper and Clifford A. Roberts, PO1:Jan 76:63:11825
Management of Connecticut River Flood Problems, S. Lawrence Dingman, WW76:Aug 76:832
Model of Hurricane Tide in Cape Fear Estuary, James E. Overland and Vance A. Myers, WW4:Nov 76:407:12549
Nebraska Flood-Plain Management Program—Part II, James R. Cook, HY7:July 75:983:11438
Nonequilibrium River Form, Michael A. Stevens, Daryl B. Simons and Everett V. Richardson, HY5:May 75:557:11334
Nonstructural Flood Control — A Case Study, Rex A. Burns and David H. Pilgrim, WW76:Aug 76:552
Non-Structural Flood Control in Rivers Flowing in Their Alluvions, Fuat Senturk, WW76:Aug 76:1199
Optimal River Cross Sections for Flood Routing, V. Seetharama Rao, Dinshaw N. Contractor and Chinchai Tiyamani, WW76:Aug 76:421
Quantitative Assessment of Changes in Urban Runoff, Irina Cech and Karen Assaf, IR1:Mar 76:119:11957
Rainfall Temporal Patterns for Design Floods, David H. Pilgrim and Ian Cordery, HY1:Jan 75:81:11057
River-Ice Problems: A State-of-the-Art Survey and Assessment of Research Needs, John F. Kennedy, Cochmn. and George D. Ashton, Cochmn., HY1:Jan 74:1:10281
Spatial Data Analysis of Nonstructural Measures, R. P. Webb and M. W. Burnham, WW76:Aug 76:329
Tests of Scour Protection for Bridge Piers, Chesley J. Posey, HY12:Dec 74:1773:11017
Upstream Flood Lowering in Reservoirs, Bob Buehler, HY2:Feb 76:151:11911
Wet and Dry Periods of Annual Flow Series, Zekai Sen, HY10:Oct 76:1503:12457

Flood Stages

Response of the Mississippi River to the Cutoffs, Brien R. Winkley, WW76:Aug 76:1267
Runoff Files for Flood Hydrograph Simulation, Alan M. Lumb and L. Douglas James, HY10:Oct 76:1515:12499

Flood Waves

Estimation of Lateral Inflow Hydrographs, Maria Mimikou and Ramachandra A. Rao, WW76:Aug 76:399
On Kinematic Wave Approximation for Flood Routing, Ruh-Ming Li, Daryl B. Simons, Larry S. Shiao and Yung H. Chen, WW76:Aug 76:377
Two Dam Break Routing Models, Thomas N. Keefer and Raul S. McQuivey, WW76:Aug 76:201

Floors

Composite Steel-Deck Concrete Floor Systems, Reinhold M. Schuster, ST5:May 76:899:12116
Design of Building Floor Systems Subjected to Steady-State Dynamic Loads, Donald W. Vannoy, Furman W. Barton and Conrad P. Heins, ST76:Aug 76:720
Design Recommendations for Steel Deck Floor Slabs, Max L. Porter and Carl E. Ekberg, Jr., ST11:Nov 76:2121:12528
Earthquake Behavior of Suspended-Floor Buildings, Barry J. Goodno and James M. Gere, ST5:May 76:973:12105
Finite Element Analysis of Layered Wood Systems, Erik G. Thompson, James R. Goodman and M. Daniel Vanderbilt, ST12:Dec 75:2659:11802
Shear-Bond Analysis of Steel-Deck-Reinforced Slabs, Max L. Porter, Carl E. Ekberg, Jr., Lowell F. Greimann and Hotten A. Elleby, ST12:Dec 76:2255:12611
Stochastic Analysis of Floor Loads, Ross B. Corotis and Viresh A. Doshi, ST76:Aug 76:72
Thermal Effect Loads of Ships on Dock Floors, Greer W. Ferver and J. Richard Lawrence, Preprint No.2651, Apr 76, 10pp.
VPM Scheduling for High-Rise Buildings, James J. O'Brien, CO4:Dec 75:895:11773

Florida

Dredge-Fill in the Coral Reef Tract of the Northern Florida Keys, George M. Griffin, DIEE:Jan 76:768
Environmental Systems at Walt Disney World, Arthur C. Bravo, EE6:Dec 75:887:11755
Flood Protection of Crystal River Unit 3 Nuclear Plant, Ronald M. Noble and Bert Simpson, PO1:July 75:85:11458
Impact of Dredge and Fill on Coastal Economic Development, Andrew A. Dzurik, DIEE:Jan 76:378
Liquefaction Considerations in Nuclear Plant Design, Joseph L. Ehasz, Jr. and William F. Mercurio, STN75:Dec 75:II-142
Mass Transport and Mean Water Level, Jacobus van de Kreeke, OE75:June 75:1266
Quarantine Island Disposal Plan, George Marsch, DIEE:Jan 76:579
Recycling Allows Zero Wastewater Discharge, Lloyd A. Dove, CE:Feb 75:48
Synthesizing Taxicab Improvements, Joseph C. Corradino, TE4:Nov 76:793:12545

Flow

Parallel Flow Between Corrugated Plates, Chang-Yi Wang, TN: EM6:Dec 76:1088:12591
Spatially Varied Flow in Channel Transitions, David T.Y. Kao and S. Dean Perry, WW76:Aug 76:1551

Flow Characteristics

Flow Characteristics of Sloping Channel Jumps, Nallamuthu Rajaratnam and Valupadas Mura Hari, HY6:June 74:731:10594
Flow-Induced Forces on Protruding Walls, Eduard Naudascher and Frederick A. Locher, HY2:Feb 74:295:10347
Solution for Steady Open Channel Flow, Fred D. Theurer, A. H. Barnes and Everett V. Richardson, WW76:Aug 76:793
South Platte River Flow Correlations, Robert E. Glover, IR3:Sept 75:175:11563
Suppression of Waves in Slotted-Walled Channel, Alfred M. Binnie, HY3:Mar 76:397:12006
Time-Reversed Unsteady Flow Computations in Waterways, Hsiao-Ling Chu, WW76:Aug 76:1535
Use of Depth Profiles for Flow-Model Calibration, Harvey E. Jobson and Thomas N. Keefer, WW76:Aug 76:641

Flow Charting

Optimum Structural Design by Dynamic Programming, P. Packia Raj and S. Olani Durrant, ST8:Aug 76:1575:12329

Flow Control

Flow Control and Transients in the California Aqueduct, Haywood C. Dewey, Jr. and Welby R. Madsen, IR3:Sept 76:335:12434

Flow Distribution
Flows Split in Closed Loops Expending Least Energy, Madan L. Arora, TN: HY3:Mar 76:455: 11954
Hydraulic Modeling Techniques in a Backwater Area, Phil G. Combs, Nolan K. Raphelt and James E. Foster, WW76:Aug 76:232

Flow Measurement
Brink Depth for Trapezoidal Broad-Crested Weir, Birendra N. Neogy, HY12:Dec 72:2171:9427
Measuring Water Velocity by Ultrasonic Flowmeter, Jack C. Schuster, HY12:Dec 75:1503:11806
Mississippi River Regime Analysis, Wallace H. Walters, Jr., WW76:Aug 76:730
Roughness Effects on Rectangular Free Overfall, Nallamuthu Rajaratnam, Durfakula Muralidhar and Spyridon Beltaos, HY5:May 76:599:12152

Flowmeters
Application of Acoustic Velocity Flowmeters, Cortland C. Lanning and Robert W. Ehrhart, Preprint No.2716, Apr 76, 19pp.
Meter for Sewer Flow Measurement, Harry G. Wenzel, Jr., HY1:Jan 75:115:11070

Flow Nets
Flow at Interface of Two Anisotropic Soil Zones, Robin N. Chowdhury, TN: GT11:Nov 76:1195: 12513
Fundamentals of Piping, Richard F. Flanagan, Preprint No.2766, Sept 76, 18pp.

Flow Patterns
Low Flow Criteria for Diversions and Impoundments, Sie Ling Chiang and Fred W. Johnson, WR2:Nov 76:227:12553

Flow Profiles
Evaluation of Friction Slope Models, Joseph R. Reed and Albert J. Wolfkill, WW76:Aug 76:1159
Flow at Grade-Break from Mild to Steep Slopes, Richard G. Weyermuller and M. Gamal Mostafa, HY10:Oct 76:1439:12458
Numerical Errors in Water Profile Computation, Edward A. McBean and Frank E. Perkins, HY11: Nov 75:1389:11694

Flow Rates
Friction Factor under Oscillatory Waves, J. William Kamphuis, WW2:May 75:135:11292

Flow Regulators
Effect of Flow Regulation on Navigation Fuel Costs, Jean-Pierre Granju and Walter O. Wunderlich, WW76:Aug 76:65
Flow Regulation Effects on Stream Flow Prediction, Carl Mark Koch, WW76:Aug 76:627
Urban Runoff Pollution Control—State-of-the-Art, Richard Field and John A. Lager, EE1:Feb 75:107: 11129

Flow Resistance
Channel Flow Over Permeable Beds of Graded Spheres, Anthony F.E. Zagni and Kenneth V.H. Smith, HY2:Feb 76:207:11892
Flow Resistance in Broad Shallow Grassed Channels, Cheng-lung Chen, HY3:Mar 76:307:11994
Resistance Equation for Alluvial-Channel Flow, Durl E. Burkham and David R. Dawdy, HY10:Oct 76: 1479:12462

Flow Stress
Fluid-Dynamic Excitation Involving Flow Instability, Wallace W. Martin, Eduard Naudascher and Mahadevan Padmanabhan, HY6:June 75:681:11361

Flow Visualization
Flow Visualization in Free Shear Layers, Joseph A. Clark and Eric Markland, HY11:Nov 73:1897: 10119

Fluctuation
Effects of Surface Fluctuations on Wave Field Statistics, Chi C. Tung and Keikhosrow Pajouhi, Preprint No.2705, Apr 76, 17pp.
Simulation of Future River Fluctuations, Douglas D. Speers, WW76:Aug 76:608

Flue Gases
Flue Gas Scrubbing at Eddystone Station, George Kotnick, Preprint No.2779, Sept 76, 24pp.

Fluid Dynamics
Fluid-Dynamic Excitation Involving Flow Instability, Wallace W. Martin, Eduard Naudascher and Mahadevan Padmanabhan, HY6:June 75:681:11361
Influence of Wave-Current Interactions on Fluid Forces, Chi C. Tung, Preprint No.2706, Apr 76, 12pp.
Seismic Design of Liquid-Storage Tanks, Howard I. Epstein, ST9:Sept 76:1659:12380

Fluid Flow
Channel Flow Over Permeable Beds of Graded Spheres, Anthony F.E. Zagni and Kenneth V.H. Smith, HY2:Feb 76:207:11892
Comparison of Numerical Schemes, John C. Bruch, Jr. and Roland W. Lewis, NMG:June 76:I-115
Computation of Seismic Induced Flow Landslide, Hung Tao Shen and Wen Huang, NMG:June 76:II-1054
Convective Transport Finite Element Analog, Keith W. Bedford and James A. Liggett, EM6:Dec 75: 803:11807
Design of Conduit System with Diverging Branches, Kwang-Ping Yang, Tung Liang and I-Pai Wu, HY1: Jan 75:167:11080
Dynamic Relaxation Solution of Seepage Problems, Chandrakant J. Parekh, NMG:June 76:II-1133
Evaluation of Circulation in Estuaries, Karim A. Abood and Efstathios L. Bourodimos, HY9:Sept 76: 1211:12408
Finite Element Analysis of Grout Propagation, Manfred Wallner and Walter Wittke, NMG:June 76:II-1119
Finite Element Solution of Saint-Venant Equations, Richard L. Cooley and Syed Afaq Moin, HY6:June 76:759:12213
Flow at Grade-Break from Mild to Steep Slopes, Richard G. Weyermuller and M. Gamal Mostafa, HY10:Oct 76:1439:12458
Hydraulic Fracture and Heat Extraction from Hot Dry Rock Masses: A Finite Element Approach, S. Nemat-Nasser, Zdenek P. Bazant and H. Ohtsubo, NMG:June 76:I-79
Hydraulic Performance of Tilting-Disk Check Valves, Ronald S. Kane and Soung M. Cho, HY1:Jan 76: 57:11873
Impinging Circular Turbulent Jets, Spyridon Beltaos and Nallamuthu Rajaratnam, HY10:Oct 74:1313: 10852
Major Junction Structure Verified by Modeling, Charles H. Lawrance and Munson W. Dowd, HY4: Apr 76:499:12066
Non-Linear Flow and Deformation Analysis of Consolidated Problems, Roland W. Lewis, G. W. Roberts and Olgierd C. Zienkiewicz, NMG:June 76:II-1106
Numerical Computation of Two-Dimensional Flows, John P. Grubert, WW1:Feb 76:1:11891
Numerical Computation of Well-Mixed Estuarine Flows, John P. Grubert, HY7:July 76:955:12255
Numerical Solution of Unconfined Seepage Problems, W. D. Liam Finn and Erol Varoglu, NMG:June 76: III-1465
Oblique Impingement of Plane Turbulent Jets, Spyridon Beltaos, HY9:Sept 76:1177:12388
Parallel Motion of Corrugated Plates, Chang-Yi Wang, TN: EM2:Apr 76:373:12017
Peak Distribution of Random Wave-Current Force, Chi C. Tung, EM5:Oct 74:873:10843
Resonance Phenomena Due to Turbulent Boundary Layer Excitation of Elastic Surfaces, Robert L. Ash and R. Balasubramanian, Preprint No.2726, Apr 76, 28pp.

Shallow Laminar Flows over Rough Granular Surfaces, Harry O. Phelps, HY3:Mar 75:367:11166
Similitude in Free-Surface Vortex Formations, Larry L. Daggett and Garbis H. Keulegan, HY11:Nov 74: 1565:10941
Simulation of Hydraulic Processes in Open Channels, Chao-Lin Chiu, Hsin-Chi Lin and Kazumasa Mizumura, HY2:Feb 76:185:11905
Study of Fluid Movements through Causeway, Ralph Ta-Shun Cheng and Min-Hsiung Hu, HY1: Jan 75:155:11076
Submerged Buoyant Jets in Quiscent Fluids, Daniel T.L. Chan and John F. Kennedy, HY6:June 75:733: 11383
Surface Shear Waves, D. Howell Peregrine, HY9:Sept 74:1215:10809
Transient Hydrothermal Analysis of Small Lakes, Lawrence A. Loziuk, James C. Anderson and Ted B. Belytschko, PO2:Nov 73:349:10150
Unsteady Lifts and Wakes of Oscillating Rectangular Prisms, Yasuharu Nakamura and Taketo Mizota, EM6:Dec 75:855:11813
Velocities Above Rough Bed in Oscillatory Flow, John F.A. Sleath, WW4:Nov 74:287:10930

Fluid Mechanics
Comparison of Warm Water Evaporation Equations, Richard N. Weisman, HY10:Oct 75:1303:11620
Cross-Flow Response of Piles Due to Ocean Waves, Rimas Vaicaitis, EM1:Feb 76:121:11897
Drag and Inertia Coefficients in Oscillatory Flow About Cylinders, C. J. Garrison, Preprint No.2693, Apr 76, 24pp.
Interaction of Multiple Jets with Ambient Current, Ralph R. Boericke, HY4:Apr 75:357:11247

Flumes
Automated Wet Sand Feeder for Open-Circuit Flumes, Michael G. Foley and Elton F. Daly, TN: HY1:Jan 76:136:11820
Bed Form Response to Nonsteady Flows, D. Michael Gee, HY3:Mar 75:437:11195
Discharge Equations for HS, H, and HL Flumes, Wendell R. Gwinn and Donald A. Parsons, HY1: Jan 76:73:11874
Placing Artificial Beach Nourishment, J. William Kamphuis and S. G. Bridgeman, OE75:June 75:197
Resistance to Flows in Alluvial Channels, ChiEmeka G. Ilo, HY6:June 75:665:11352
Simple Flume for Guidance and Impingement Studies, James L. Congleton and Ronald D. Mayo, PO1:July 75:35:11416
Stochastic Analysis of Dune Bed Profiles, Baum K. Lee and Harvey E. Jobson, HY7:July 74:849:10657
Venturi Flumes for Circular Channels, Mordechai H. Diskin, TN: IR3:Sept 76:383:12369

Flushing
Renewal Characteristics of Chesapeake Bay, A. Y. Kuo, Evon P. Ruzecki and Ching S. Fang, OE75: June 75:1065

Flutter
Binary Flutter of Suspension Bridge Deck Sections, Yasuharu Nakamura and Takeshi Yoshimura, EM4: Aug 76:685:12327
Torsional Flutter of Rectangular Prisms, Yasuharu Nakamura and Taketo Mizota, EM2:Apr 75:125: 11226
Unsteady Lifts and Wakes of Oscillating Rectangular Prisms, Yasuharu Nakamura and Taketo Mizota, EM6:Dec 75:855:11813

Fluvial Hydraulics
Minimum Unit Stream Power and Fluvial Hydraulics, Chih Ted Yang, HY7:July 76:919:12238
River Regime with Special Reference to River Nile, Mohamed Bakr Khalil, HY1:Jan 75:135:11072

Fluvial Morphology
Classification and Analysis of River Processes, Rolf Kellerhals, Michael Church and Dale I. Bray, HY7: July 76:813:12232

Fly Ash
Deck Slab Repaired by Fibrous Concrete Overlay, Ernest K. Schrader and Anthony V. Munch, CO1: Mar 76:179:11976
New and Conventional Engineering Uses of Fly Ash, Ramesh C. Joshi, Donald M. Duncan and Howard M. McMaster, TE4:Nov 75:791:11730

Foam
Analysis of Sandwich Panels with Formed Faces, John A. Hartsock and Ken P. Chong, ST4:Apr 76: 803:12058
Axial Compression of Formed-Faced Sandwich Panels, Ken P. Chong, Pei-Chung Liu and Kjell Oistein Engen, Preprint No.2807, Sept 76, 22pp.

Folded Plates
Discrete Field Stability Analysis of Ribbed Plates, R. Richard Avent and Dieter Bounin, ST9:Sept 76: 1917:12413
Elastic Stability of Polygon Folded Plate Columns, R. Richard Avent and James H. Robinson, Jr., ST5: May 76:1015:12108
Folded-Plate Structures, Jerome S.B. Iffland, Preprint No.2807, Sept 76, 66pp.
Limit Design of Folded Plate Structures, Morris N. Fialkow, ST76:Aug 76:222
Local Buckling of Long-Span Concrete Folded Plates, Stuart E. Swartz and Vernon H. Rosebraugh, ST10: Oct 76:1981:12455
Local Buckling of Long-Span Folded Plates, Stuart E. Swartz, Vernon H. Rosebraugh and Guang-Nan Fanjiang, ST5:May 75:1097:11298
Plastic Collapse of Folded Plate Structures, Morris N. Fialkow, ST7:July 75:1559:11465

Food
Food and Agricultural Policies, Earl O. Heady, Preprint No.2754, Sept 76, 16pp.
Project Formulation in Today's World — Some Rural Development Dimensions, Graham F. Donaldson, IR76:July 76:700

Footings
Albany South Mall: Largest State Government Complex, John C. Byron, CE:May 76:66
Dynamic Analysis of Footings on Layered Media, Eduardo Kausel, Jose M. Roesset and Gunter Waas, EM5:Oct 75:679:11652
Energy Absorbing Boundary for Anisotropic Material, Somasundaram Valliappan, Weeks White and Ian K. Lee, NMG:June 76:II-1013
Forced Vibrations of Strip Footings on Layered Soils, George C. Gazetas and Jose M. Roesset, ST76:Aug 76:115
Incremental Stress-Strain Relationship for Cohesionless Soil, F. Darve, S. Labanieh and R. Chambon, NMG:June 76:I-264
Nonlinear Analyses in Soil and Solid Mechanics, Hugh L. Davidson and Wai F. Chen, NMG:June 76:I-205
Nonlinear Analysis of Foundation Vibrations, Mete Oner and Nilmar Janbu, NMG:June 76:II-1025
On Load Tests in Soft Clays, Bernd R. Thamm, NMG:June 76:I-557
Response of Footings on Micaceous, Cohesionless Soils, Jean M.E. Audibert, Nabil F. Ismael and G. Wayne Clough, NMG:June 76:I-567
Some Finite Element Solutions in the Dynamics of Circular Footings, S. P. Dasgupta and N. S.V. Kameswara Rao, NMG:June 76:II-1038
Three-Dimensional Analysis of Vertical Pile Groups, Prasanta K. Banerjee and Richard M. Driscoll, NMG:June 76:I-438

Force
Anchor-Last Deployment Simulation by Lumped Masses, Robert W. Thresher and John H. Nath, WW4:Nov 75:419:11709
Concrete Structures for Subsea Oil Recovery — Design Considerations, Everald V. Wright and Marcel Gerbault, Preprint No.2675, Apr 76, 21pp.
Dynamic Behavior of Box-Girder Jetties, Trevor J. Poskitt, WW2:May 75:181:11310

Forces on Many Cylinders Near a Plane Boundary, Tokuo Yamamoto and John H. Nath, Preprint No.2633, Apr 76, 19pp.
Hydrodynamic Forces on Cables Subject to Frequency Varied Motion, Robert W. Haas and Richard F. Dominguez, Preprint No.2728, Apr 76, 26pp.
Interaction of Water Waves with Cylinder Barrier, Stanislaw R. Massel, WW2:May 76:165:12125
Optimization in Trusses Using Optimal Control Theory, Narasingam M. Singaraj and Jawalker K. Sridhar Rao, ST5:May 75:1037:11304
Peak Distribution of Random Wave-Current Force, Chi C. Tung, EM5:Oct 74:873:10843
Wave Forces on a Submerged Hemispherical Shell, Robert A. Naftzger and Subrata K. Chakrabarti, OE75:June 75:959
Wave Forces on Large Bodies—A Survey of Numerical Methods, Jared L. Black, OE75:June 75:924
Waves and Wave Forces in the Presence of Currents, Robert A. Dalrymple, OE75:June 75:999

Forced Vibration

Dynamic Response of Cantilevers with Attached Masses, Anthony N. Kounadis, EM5:Oct 75:695:11616
Flow-Induced Forces on Protruding Walls, Eduard Naudascher and Frederick A. Locher, HY2:Feb 74:295:10347

Forecasting

Aggregate and Disaggregate Travel Demand Models, Arnim H. Meyburg and Peter R. Stopher, TE2:May 75:237:11299
America's Energy Futures, Monte Canfield, Jr., EFEEC:Aug 75:6
Automation in Surveying and Mapping: Present and Future, Morris M. Thompson, Preprint No.2760, Sept 76, 17pp.
Characterization and Models of the Watershed Storage Process, A. R. Rao, Pen-Chih Tao and C. Rukvichai, Preprint No.2663, Apr 76, 27pp.
Coastal Dispersion of Pollutants, Ryszard B. Zeidler, WW2:May 76:235:12121
Concepts of Project Planning and Control, Boyd C. Paulson, Jr., CO1:Mar 76:67:11984
Conceptual RMC/Time Synthesis, Marvin Gates and Amerigo Scarpa, CO2:June 76:307:12181
Consolidation Settlement of a Layered Subsurface, Surendra K. Saxena, Chandrakant S. Desai and Jayant Vir, NMG:June 76:II-1082
Delphic Predictions and Cross Impact Simulation, Jarir S. Dajani and Gorman Gilbert, UP1:May 75:49:11316
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., Preprint No.2643, Apr 76, 10pp.
Design Lead Time Predictions, Earl Rogers, TE4:Nov 76:737:12569
Developing Alternative Futures, John M. Courtney, UP1:Aug 76:49:12337
Environment — 25 Years Ahead, Ira L. Whitman, CE:Jan 76:52
Estimation of Washload Produced on Certain Small Watersheds, Oswald Rendon-Herrero, HY7:July 74:835:10638
Forecasts and the Role of Alternative Futures, Richard C. Tucker, Chmn., WR2:Nov 76:365:12578
The Great River Study — A New Perspective in River Management, William R. Pearson and Dennis E. Cin, WW76:Aug 76:536
The History of Computers — A Vendor's View, Vincent J. Vitagliano, Preprint No.2759, Sept 76, 22pp.
Hybrid Computer Model of St. Venant Equations, Martin Oosterveld and Kaz Adamowski, HY10:Oct 76:1491:12467
Interactive Simulation for Water System Dynamics, Neil S. Grigg and Maurice C. Bryson, UP1:May 75:77:11313
Internal Migration Models and Population Forecasts, Hatim M. Hajj, UP2:Nov 75:201:11680
Keynote Adress - Man as the Measure, Nathaniel A. Owings and Cabell Gwathmey, EFAN:Dec 74:5
Mathematical Model to Simulate Channel Deformation, Purshottam Dass and Daryl B. Simons, WW76:Aug 76:1
Methodology of Construction Industry Profiling: A Case History, Mark H. Jordan, EI1:Jan 76:67:11864
Modeling Method Productivity, James J. Adrian and LeRoy T. Boyer, CO1:Mar 76:197:11983
National Highway Travel Forecasts, Gary E. Maring, TE4:Nov 76:759:12558
New Methods in Construction Systems, R. Richard LeVitt, CO3:Sept 74:211:10788
One-Dimensional Temperature Predictions in Unsteady Flows, Dominque N. Brocard and Donald R.F. Harleman, HY3:Mar 76:227:11982
Past and Future of Construction Equipment — Part III, James Douglas, CO4:Dec 75:699:11778
Pocket Calculators Take Hold in Civil Engineering, Eugene E. Dallaire, CE:Feb 75:39
A Practical Monthly Optimum Operations Model, Dan M. Fults, Lawrence F. Hancock and Glen R. Logan, WR1:Apr 76:63:12063
Prediction of Mixing Lengths for River Flow Gaging, Peter R.B. Ward, HY7:July 73:1069:9856
Present and Future Directions in Design Education, Roger K. Seals and William J. Wilhelm, EI1:Jan 75:37:11044
Present and Future Trends in Harbor and Port Facilities, Billy E. Smith, Preprint No.2814, Sept 76, 10pp.
Probabilistic Time Scheduling, Keith C. Crandall, CO3:Sept 76:415:12398
Procedures for Evaluation of Earthquake Risk to Buildings, R. Martin Czarnecki, E. C. Wang and Sigmund A. Freeman, Preprint No.2804, Sept 76, 28pp.
Productivity as Influenced by Design Management Processes, Winfield O. Salter, PROD:Aug 76:1
The Professional Engineer Half a Century Hence, Alfred C. Ingersoll, CE:Mar 75:74
Role of Offshore Nuclear Power Plants, Joseph A. Fischer and Harcharan Singh, PO1:July 75:1:11407
Sensitivity of Trip Distribution to Subarea Focusing, Nancy L. Nihan and Jacques Lassabliere, TE3:Aug 76:555:12317
Simple Method for Predicting Dispersion in Streams, Raul S. McQuivey and Thomas N. Keefer, EE4:Aug 74:997:10708
Some Factors Affecting Land Use for Energy Centers, Harry A. Kornberg, EFEEC:Aug 75:48
Subsidence Over Soft Ground Tunnel, Roger A. Butler and Delon Hampton, GT1:Jan 75:35:11074
Transportation Energy Considerations, Alexander French, TE1:Feb 76:27:11919
Transportation for the 1980's and Its Effect on Energy, the Economy and the Environment, James T. Sullivan, Preprint No.2816, Sept 76, 4pp.
Trip Production Forecasting Models for Urban Areas, William J. Fogarty, TE4:Nov 76:831:12557
Two Hundred Years—and More—of Engineering in the United States, Charles A. Parthum, EI4:Oct 76:423:12506
Urban Travel Demand Models with Competitive Modes, Paul J. Ossenbruggen and Alex Li, TE3:Aug 76:585:12314
Use of Decision Theory in Reservoir Operation, Samuel O. Russell, HY6:June 74:809:10586
Water Planning — An Overview, Eugene W. Weber, Preprint No.2754, Sept 76, 8pp.
Water Quality Models Using the Box-Jenkins Method, Peter M. Huck and Grahame J. Farquhar, EE3:June 74:733:10629

Foreign Engineering

Civil Engineers and Unions in Sweden, Robert D. Holtz, CE:Nov 75:53
Metrication—SI in America, Cornelius Wandmacher, EI1:Jan 75:25:11073

Forests

Effects of Deforestation of Slopes, Colin E. Brown and Maw S. Sheu, GT2:Feb 75:147:11141

Formations
Behavior of Fabricated Tubular Columns Under Biaxial Bending, Wai F. Chen and D. A. Ross, Preprint No.2659, Apr 76, 21pp.

Formulas
Applicability of Unit Stream Power Equation, Chih Ted Yang and John B. Stall, HY5:May 76:559:12103
Discharge Equations for HS, H, and HL Flumes, Wendell R. Gwinn and Donald A. Parsons, HY1:Jan 76:73:11874

Formwork (Construction)
Falsework Eliminated in Bridge Erection, Gene K. Hallock, CE:Nov 76:58
Fifty-Year Advancement in Concrete Bridge Construction, Tung. Y. Lin and Felix Kulka, CO3:Sept 75:491:11558
Form Pressure and Relaxation in Formwork, Myron Levitsky, EM3:June 75:267:11379
Fort St. Vrain PCRV Bottom Head Construction, Hughes M.G. Nerses and Clyde B. Tatum, CO2:June 75:391:11394
Hardinge Bridge Span Repair, Amitabha Ghosal, Jagadish C. Ganguly, Himangsu K. Banerjee and Mahesh P. Kapoor, CO4:Dec 74:631:11034
Structural Failures and How to Prevent Them, Dov Kaminetzky, CE:Aug 76:60

Fortran
Providing the Profession with Design Programs, Eddie Y.L. Chien and Michael I. Gilmor, EI2:Apr 75:165:11261
Sparsity Oriented Analysis of Large Pipe Networks, M. Chandrashekar and K. H. Stewart, HY4:Apr 75:341:11260

Foundation Failure
Difficult Dam Problems - - Cofferdam Failure, Harry E. Thomas, Eugene J. Miller and John J. Speaker, CE:Aug 75:66

Foundation Investigations
Method for Crosshole Seismic Testing, Robert F. Ballard, Jr., GT12:Dec 76:1261:12646
New Design Procedure for Stability of Soft Clays, Charles C. Ladd and Roger Foott, GT7:July 74:763:10664
Rock Strain Recovery — Factor in Foundation Design, T. C. Nichols, Jr. and W. Z. Savage, GT76:Aug 76:34
Static and Dynamic Flexibility Matrix for a Semi-Infinite Solid, Tarun R. Naik and Chu-Kia Wang, ST76:Aug 76:644
Structural Design and Analysis of Atlanta Center, Ltd., Stephen J. Campbell and Bill L. Gunnin, ST76:Aug 76:771

Foundations
Aspects of the Analysis of Gravity Offshore Structures, Ian M. Smith, NMG:June 76:II-957
Bearing Capacity of Offshore Gravity Structures, Surendra K. Saxena, W. M. Kilkenny and Joseph A. Fischer, OE75:June 75:450
Behavior of Bored Piles in Sand, Fadlo T. Touma and Lymon C. Reese, GT7:July 74:749:10651
Calculation of Raft Foundations on Clayey Silts, Quirin Laumans and Hermann Schad, NMG:June 76:I-475
Design of Large Papermachine Mat Foundation, Anton W. Wegmuller, James H. Woodward and John R. Bayliss, ST1:Jan 76:231:11863
Design of Steel Transmission Pole Structures, Gene M. Wilhoite, Chmn., ST12:Dec 74:2449:11009
Distribution of Subgrade Reaction Using Substructuring Finite Element Methods, Satyananda Chakrabarti, Nishikant R. Vaidya and Donald E. Shaw, NMG:June 76:I-551
Dynamic Response of Embedded Machine Foundations, Kenneth H. Stokoe, II and Frank E. Richart, Jr., GT4:Apr 74:427:10499
Dynamic Stiffness Matrices for Viscoelastic Half-Plane Foundations, Anil K. Chopra, P. Chakrabarti and Gautam Dasgupta, EM3:June 76:497:12209
Effect of Drains on Pressures Below Structures, Amrik S. Chawla, GT1:Jan 76:15:11827
Effects of Foundation Tipping on Dynamic Response, Jethro W. Meek, ST7:July 75:1297:11411
Failures in Limestones in Humid Subtropics, George F. Sowers, GT8:Aug 75:771:11521
Finite Element Analysis of Piles in Viscoelastic Soil, John R. Booker and Harry G. Poulos, NMG:June 76:I-425
Foundation Considerations for a Nuclear Power Plant, George A. Faillace, CO1:Mar 75:165:11181
Geotechnical Aspects of Trans-Alaska Pipeline, Ulrich Luscher, William T. Black and Keshavan Nair, TE4:Nov 75:669:11722
Highlights of San Diego Convention, CE:June 76:67
Interaction of Soil and Power Plants in Earthquakes, Jeremy Isenberg and Samy A. Adham, PO2:Oct 72:273:9242
Lateral Load-Deflection Prediction for Pile Groups, Harry G. Poulos, GT1:Jan 75:19:11061
Lateral Loading of Deep Foundations in Stiff Clay, Lymon C. Reese and Robert C. Welch, GT7:July 75:633:11456
Limit Load of a Foundation in a Strain-Softening Soil, Paolo Biondi, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:I-591
Marine Soil Mechanics and Foundations II, State-of-the-Art Summary, Anton L. Inderbitzen, OE75:June 75:486
Massive Compaction of Granular Soil — How We Stand, Henry W. Janes and Robert D. Anderson, Preprint No.2777, Sept 76, 28pp.
Matrix Analysis of Structure-Foundation Interaction, Fukashi Miyahara and John G. Ergatoudis, ST1:Jan 76:251:11836
Natural Frequencies of a Turbine Foundation, Chung-Tung Shen and Norman E. Stone, STN75:Dec 75:II-302
A New Concept for the Relative Rigidity of Rafts, B. Ramanathan, NMG:June 76:I-489
New Foundations in an Old Neighborhood, Edmund G. Johnson, CE:Nov 76:50
Nonlinear Analysis of Foundation Vibrations, Mete Oner and Nilmar Janbu, NMG:June 76:II-1025
Nuclear Turbine-Generator Foundation Model Tests, Ish K. Aneja and Brian W. Dimmick, Preprint No.2704, Apr 76, 30pp.
Numerical Analysis of Rigid Pavement Resting over Hookean Subgrade Continuum, Madan G. Arora and Sudarshan K. Khanna, NMG:June 76:I-511
A Numerical Method of Analysis of Foundation Plates, Alexander M. Gorlov, NMG:June 76:III-1371
A Numerical Solution for Viscoelastic Half Planes, Gautam Dasgupta, EM4:Aug 76:601:12325
A Performance Standard for Foundations and Excavations, Felix Y. Yokel, CE:Oct 76:80
Predicting Deformation in the Fort Union Formation, Van A. Silver, Samuel P. Clemence and Richard W. Stephenson, GT76:Aug 76:13
Prediction of Downdrag Forces in End-Bearing Piles, Harry G. Poulos and Edward H. Davis, GT2:Feb 75:189:11144
Present and Future Trends in Foundations, Robert E. White, Preprint No.2795, Sept 76, 17pp.
Pueblo Dam - A Bureau of Reclamation First, Harold G. Arthur, CE:July 75:70
Reducing Negative Friction with Bitumen Slip Layers, Alphonsus I. M. Claessen and Endre Horvat, GT8:Aug 74:925:10764
Response of Footings on Micaceous, Cohesionless Soils, Jean M.E. Audibert, Nabil F. Ismael and G. Wayne Clough, NMG:June 76:I-567
Role of Contract and Specifications in Foundations Construction, Max E. Greenberg, CO2:June 74:113:10607
Seismic Interaction of Structures on Hysteretic Foundations, Anestis S. Veletsos and V. V. Damodaran Nair, ST1:Jan 75:109:11046
Seismic Risk Map, CE:Dec 76:59

Some Applications of Prestressing in Foundation Construction, Ingvar Schousboe, CO2:June 75:403: 11395
Some Finite Element Solutions in the Dynamics of Circular Footings, S. P. Dasgupta and N. S.V. Kameswara Rao, NMG:June 76:II-1038
Stability of Structures with Intermediate Filters, Amrik S. Chawla, HY2:Feb 75:223:11139
Stiffness Coefficients for Embedded Footings, Gordon R. Johnson, Paul P. Christiano and Howard I. Epstein, GT8:Aug 75:789:11522
Stresses in Soils due to Vertical Load on Piles, Verendra Singh, NMG:June 76:I-451
The Superdome Foundation, Thor L. Anderson and Melvin C. Williams, CO1:Mar 76:81:11971
Thick Plates on Elastic Foundations by Finite Elements, Otto J. Svec, EM3:June 76:461:12215
Three-Dimensional Analysis of Vertical Pile Groups, Prasanta K. Banerjee and Richard M. Driscoll, NMG:June 76:I-438
Torsional Response of Rigid Embedded Foundation, Rany J. Apsel and Juan Enrique Luco, EM6:Dec 76:957:12627
Treatment of Soft Foundations — A Review of Current Practice, Ara Arman, Preprint No.2797, Sept 76, 36pp.
Tschebotarioff, Foundations Pioneer, Looks Back— and Ahead, CE:May 76:99
Uplift Capacity of Model Piles Under Oblique Loads, Braja M. Das, Gerald R. Seeley and Dorairaja Raghu, TN: GT9:Sept 76:1009:12367
3-D Finite Element Analysis of a Dam Foundation, Walter Wittke and Stephen Semprich, NMG:June 76:III-1385

Fractions

Low-Temperature Tests of Simulated Bridge Members, Charles G. Schilling, Karl H. Klippstein, John M. Barsom, Stephan R. Novak and Gilbert T. Blake, ST1:Jan 75:31:11049

Fracture Mechanics

Numerical Analysis of Thermal Crack Propagation in Pavement Overlays, H. S. Chang, Robert L. Lytton and S. H. Carpenter, NMG:June 76:I-526

Fracture Properties

Fracture and Stress-Strain Relationship of Concrete Under Triaxial Compression, Ranga Palaniswamy and Surendra P. Shah, ST5:May 74:901:10547

Fractures

Choice and Application of Computer Programs in Pipe Whip Analysis, Vera F. Dunder and Klaus-Jurgen Bathe, STN75:Dec 75:II-379
Fatigue and Fracture of Bridge Steels, Richard Roberts and George R. Irwin, ST2:Feb 76:337: 11913

Fractures (Materials)

Fracture Sensitivity of Dynamically Loaded Girders, Donald S. Mansell and Peter Dobos, ST12:Dec 75: 2523:11754

Fracture Strength

Fracture Sensitivity of Dynamically Loaded Girders, Donald S. Mansell and Peter Dobos, ST12:Dec 75: 2523:11754
Steels for the Sea, J. H. Gross, Preprint No.2732, Apr 76, 26pp.

Fracturing

Hydraulic Fracture and Heat Extraction from Hot Dry Rock Masses: A Finite Element Approach, S. Nemat-Nasser, Zdenek P. Bazant and H. Ohtsubo, NMG:June 76:I-79
Load Transfer and Hydraulic Fracturing in Zoned Dams, Fred H. Kulhawy and Thomas M. Gurtowski, GT9:Sept 76:963:12400

Frame Design

FAR — A Self-Teaching Frame Analysis Routine, Yehia Bahel-El-Din and Senol Utku, Preprint No.2737, Sept 76, 44pp.

Frames

Analysis of Lateral Buckling in Plane Frames, Porpan Vacharajittiphan and Nicholas S. Trahair, ST7:July 75:1497:11430
Approximate Analysis of Multistory Multibay Frames, Paul C.K. Chan, Arthur C. Heidebrecht and Wai K. Tso, ST5:May 75:1021:11302
Collapse Load Analysis of Frames Considering Axial Forces, M. Z. Cohn and Tariq Rafay, EM4:Aug 74: 773:10757
Column Design by P Delta Method, Brian R. Wood, Denis Beaulieu and Peter F. Adams, ST2:Feb 76: 411:11936
Design Applications: The SSRC Guide, Third Edition, Bruce G. Johnston, Preprint No.2802, Sept 76, 33pp.
Effective Column Length in Polygon Shaped Frames, Kuang-Han Chu and Robert H. Rampetsreiter, TN: ST8:Aug 76:1629:12288
Elastic and Elasto-Plastic Computerized Dynamic Analysis of Frame Structures Subjected to Blast Overpressure, George S. Tseng, William Stea, Samuel Weissman, Norval Dobbs and Paul Price, ST76:Aug 76:977
Frame Collapse Using Tangent Stiffness, William Tranberg, Peter Swannell and John L. Meek, ST3: Mar 76:659:11979
Gradient Methods in Optimum Structural Design, Emil O. Frind and Peter M. Wright, ST4:Apr 75: 937:11236
High Rise Building Column Design, Jerome S.B. Iffland, Preprint No.2740, Sept 76, 28pp.
Inelastic Analysis of Reinforced Concrete Frames, Leone Corradi, Osvaldo De Donato and Giulio Maier, ST9:Sept 74:1925:10832
Inelastic Cyclic Response of Split K-Braced Frames, Movses J. Kaldjian, Preprint No.2788, Sept 76, 15pp.
Inelastic Sway Buckling of Multistory Frames, Francois Cheong-Siat-Moy, ST1:Jan 76:65:11848
Large-Deflection Spatial Buckling of Thin Walled Beams and Frames, Zdenek P. Bazant and Mahjoub El Nimeiri, EM6:Dec 73:1259:10247
Linear Structural Analysis of Multistory Buildings, R. Shankaran Nair, ST3:Mar 75:551:11163
Multistory Frame Design Using Story Stiffness Concept, Francois Cheong Siat Moy, ST6:June 76: 1197:12221
Optimum Frame Design Using Available Sections, Kuan-Chen Fu and Kuang-Wei You, ST76:Aug 76: 1049
Preliminary Plastic Design of Tall Steel Frames, M. Bassam El Hafez and Graham H. Powell, ST9:Sept 74:1837:10796
Seismic and Cyclonic Response of Continuous Frames, Gerald M. Smith, George C. Ernst and Mahendra Maheshwari, ST2:Feb 74:391:10355
Seismic Behavior of K-Braced Framing Systems, James C. Anderson, ST10:Oct 75:2147:11636
Seismic Supports for Electrical Cable Systems, Anil K. Kar and Sitansu S. Sinha, PO1:July 75:95:11464
Shear Behavior of Steel Frame Joints, Helmut Krawinkler, Vitelmo V. Bertero and Egor P. Popov, ST11:Nov 75:2317:11717
Simplified Analysis of Framed-Tube Structures, Alexander Coull and Bishwanath Bose, ST11:Nov 75:2223:11696
Simplified Analysis of Wall-Frame Building Structures, Carlos A. Prato, TN: ST12:Dec 76: 2353:12593
Simulated Earthquake Tests of R/C Frames, Shunsuke Otani and Mete A. Sozen, ST3:Mar 74: 687:10435
Subassemblage Concept for Tall Frame Analysis, Graham H. Powell and M. Bassam El Hafez, ST8: Aug 74:1611:10739
Torsion of Frame-Tube Structures, Alexander Coull and Bishwanath Bose, TN: ST12:Dec 76:2366: 12593
Variable Energy Ratio Method for Structural Design, James W. Gorzynski and William A. Thornton, ST4:Apr 75:973:11266

Weight Optimization of Plane Trusses, Samuel L. Lipson and Krishna M. Agrawal, ST5:May 74:865: 10521

France
Further Insights on the Self-Boring Technique Developed in France, Francois Baguelin and Jean-Francois Jezequel, GT75:June 75:II-231
Reinforced Earth: A New Alternative for Earth Retention Structures, David S. Gedney and David P. McKittrick, CE:Oct 75:58

Frank M. Masters Award
1976 Frank M. Masters Transportation Engineering Award Presented to S. Starr Walbridge, CE:Oct 76: 103

Free Falls
Anchor-Last Deployment Simulation by Lumped Masses, Robert W. Thresher and John H. Nath, WW4:Nov 75:419:11709

Free Flow
Steady Non-Darcian Seepage Through Embankments, P. Basak, IR4:Dec 76:435:12623

Free Surfaces
Approximate Solution for Unconfined Seepage, Chandrakant S. Desai, IR1:Mar 73:71:9607
Effects of Surface Fluctuations on Wave Field Statistics, Chi C. Tung and Keikhosrow Pajouhi, Preprint No.2705, Apr 76, 17pp.
Solutions for Unconfined Non-Darcy Seepage, Raymond E. Volker, IR1:Mar 75:53:11203
Statistics of Random Wave Field, Keikhosrow Pajouhi and Chi C. Tung, WW4:Nov 75:435:11734
Steady Non-Darcian Seepage Through Embankments, P. Basak, IR4:Dec 76:435:12623

Freeway Planning
Modeling Social Impacts of Urban Highways, David C. Colony and Abul B. Shah Alam, TE2:May 76: 395:12148
Population Change: An Indicator of Freeway Impact, Pai-kang Wang, George L. Peterson and Joseph L. Schofer, TE3:Aug 75:491:11492

Freeze-Thaw Tests
Durability Tests on Some Aggregates for Concrete, L. Srinivasa-Iyer, Perry M. Rahn, Venkataswamy Ramakrishnan and James E. Russell, CO3:Sept 75: 593:11574

Freezing
Dewatering Rock for Construction, George F. Sowers, GT76:Aug 76:200
Diffusion of Water under Subfreezing Temperature, Jai P. Gupta and Stuart W. Churchill, TN: GT2: Feb 76:185:11885
Micro-Climate Control of Deciduous Fruit Production with Overhead Sprinklers, Richard E. Griffin, IR76:July 76:278

Freight
Urban Goods Movement: A Study Design, Arnim H. Meyburg and Peter R. Stopher, TE4:Nov 76:651: 12531

Freight Cars
Apparel-Goods Movement Process, Sam Kahan, Carl M. Berkowitz and Walter H. Kraft, TE3:Aug 76: 507:12298

Freight Shipment Size
Urban Goods Movement: A Study Design, Arnim H. Meyburg and Peter R. Stopher, TE4:Nov 76:651: 12531

Freight Terminals
Gate-Arrival Terminals—Solution for Air Cargo?, Francis Chin, Richard de Neufville and Jorge Rebelo, TE1:Feb 76:47:11890

Freight Transportation
Energy-Intensive Analysis of Truck Transportation, Balakrishnamurthy Ashtakala, TE2:May 75:225: 11289
Gate-Arrival Terminals—Solution for Air Cargo?, Francis Chin, Richard de Neufville and Jorge Rebelo, TE1:Feb 76:47:11890
Revival of Inland Navigation in Pakistan, Irshad Ahmad, WW76:Aug 76:84
The Story of America's Transportation Revolution, Eugene E. Dallaire, CE:July 76:70
Urban Goods Movement: A Study Design, Arnim H. Meyburg and Peter R. Stopher, TE4:Nov 76:651: 12531

Frequency
Natural Frequencies of a Turbine Foundation, Chung-Tung Shen and Norman E. Stone, STN75: Dec 75:II-302

Frequency Distribution
Multivariable Flood Level Frequency Distribution, David L. Strelchuk, HY12:Dec 76:1737:12637

Fresh Water
Impact of Energy Complexes on Freshwater Environments, Loren D. Jensen, EFEEC:Aug 75: 235
Marine Ecological Impacts Associated with Power Plant Activities, B. J. Copeland and Frank N. Moseley, EFEEC:Aug 75:250

Friction
Arrangements of Separate Elastic Bodies, Colin B. Brown, EM6:Dec 76:971:12635
Computation of Wave Heights Due to Refraction and Friction, Ove Skovgaard, Ivar G. Jonsson and Jens Aa. Bertelsen, WW1:Feb 75:15:11100
Flow Resistance in Broad Shallow Grassed Channels, Cheng-lung Chen, HY3:Mar 76:307:11994
Recent Results in French Research on Reinforced Earth, Francois Schlosser and Nguyen-Thanh-Long, CO3:Sept 74:223:10800
Roadside Slope Design for Safety, Eugene L. Marquis and Graeme D. Weaver, TE1:Feb 76:61: 11922
Seismic Response of Pipelines on Friction Supports, James C. Anderson and Anand K. Singh, EM2:Apr 76:275:12043
Side Friction in Model Retaining-Wall Experiment, Peter L. Bransby and Ian A.A. Smith, GT7:July 75: 615:11447
Some Characteristics of Mechanical Wedge System, Alexander Samson, TN: EM4:Aug 76:725:12286
Strength and Related Properties of Brick Masonry, Clayford T. Grimm, ST1:Jan 75:217:11066
Surface Texture of British Concrete Pavements, William E. Murphy and David P. Maynard, TE1: Feb 75:115:11107

Friction Coefficient (Hydraulic)
Accurate Explicit Equation for Friction Factor, Akalank K. Jain, TN: HY5:May 76:674:12129
Flow Resistance in Broad Shallow Grassed Channels, Cheng-lung Chen, HY3:Mar 76:307:11994
Friction Effects on Spatially Varied Open Channel Flows with Increasing Discharge, J. D. Lin, Victor E. Scottron and Hsiang Kuei Soong, WW76:Aug 76:1517
Hydraulic Performance of Tilting-Disk Check Valves, Ronald S. Kane and Soung M. Cho, HY1:Jan 76: 57:11873
Skin Friction in Unsteady Laminar Pipe Flow, Mario F. Letelier S. and Hans J. Leutheusser, HY1:Jan 76:41:11867
Solution for Unsteady Open Channel Flow, Fred D. Theurer, A. H. Barnes and Everett V. Richardson, WW76:Aug 76:1497

Friction Coefficient (Mechanical)
Recent Results in French Research on Reinforced Earth, Francois Schlosser and Nguyen-Thanh-Long, CO3:Sept 74:223:10800

Friction Factor
Effects of Meandering in Alluvial Streams, Yasuo Onishi, Subhash C. Jain and John F. Kennedy, HY7:July 76:899:12248
Friction Factor under Oscillatory Waves, J. William Kamphuis, WW2:May 75:135:11292
Resistance to Flows in Alluvial Channels, ChiEmeka G. Ilo, HY6:June 75:665:11352
Shallow Laminar Flows over Rough Granular Surfaces, Harry O. Phelps, HY3:Mar 75:367:11166

Friction Studies
Evaluation of Friction Slope Models, Joseph R. Reed and Albert J. Wolfkill, WW76:Aug 76:1159

Friction Tests
Arrangements of Separate Elastic Bodies, Colin B. Brown, EM6:Dec 76:971:12635

Fringe Benefits
Employee Benefits, Kneeland A. Godfrey, Jr., CE:Jan 75:76

Frost Action
Durability of Concrete Construction—50 Years of Progress, Bryant Mather, CO1:Mar 75:5:11165
Failure of Anchored Sheet Pile Walls, Bengt B. Broms and Hakan Stille, GT3:Mar 76:235:12000
Heat Transfer in Soil-Water-Ice Systems, Aditya Mohan, GT2:Feb 75:97:11123

Frost Damage
Frost Heaves — A Major Dilemma for Ice Arenas, Bruce M. Thorson and J. S. Braun, CE:Mar 75:62

Frost Heave
Frost Heaves — A Major Dilemma for Ice Arenas, Bruce M. Thorson and J. S. Braun, CE:Mar 75:62

Frost Heaving
Frost Heaves — A Major Dilemma for Ice Arenas, Bruce M. Thorson and J. S. Braun, CE:Mar 75:62

Froude Number
Boundary Shear Stress as an Index of Hydraulic Jump Performance, Ronald E. Nece and Khalid Mahmood, WW76:Aug 76:978

Frozen Soils
Creep of Sand-Ice System, Robert G. Rein, Jr., Vidyutkumar V. Hathi and Cedomir M. Sliepcevich, GT2:Feb 75:115:11134
How the Soviets Build on Permafrost, Leonard LeSchack and Reuben Kachadoorian, CE:Apr 75:57
Liquefaction Criteria for the Trans-Alaska Pipeline, Neville C. Donovan and Sukhmander Singh, Preprint No.2752, Sept 76, 30pp.
Rheological Model of Laterally Stressed Frozen Soil, Khandker A. Aziz and Jan T. Laba, GT8:Aug 76:825:12316
Yukon River to Prudhoe Bay Highway — Lessons in Arctic Design and Construction, James F. McPhail, William B. McMullen and Allan W. Murfitt, CE:Feb 76:78

Fruit Crops
Micro-Climate Control of Deciduous Fruit Production with Overhead Sprinklers, Richard E. Griffin, IR76:July 76:278

Fuel Consumption
Automobile Energy Requirements, Eric Hirst, TE4:Nov 74:815:10909
Energy-Intensive Analysis of Truck Transportation, Balakrishnamurthy Ashtakala, TE2:May 75:225:11289

Fuel Costs
Effect of Flow Regulation on Navigation Fuel Costs, Jean-Pierre Granju and Walter O. Wunderlich, WW76:Aug 76:65

Fuel Economy
Carpools: How Successful?, Lew Pratsch, CE:Feb 75:61

Fuels
Automobile Energy Requirements, Eric Hirst, TE4:Nov 74:815:10909
Public Participation in the Fuel Cycle: Experiences and Perspectives, Robert E. Olson, EFEEC:Aug 75:381

Funding Allocations
Resolutions Adopted at the Fourth National Seminar on the Planning, Design and Implementation of Bicycle and Pedestrian Facilities, Elizabeth A. Drake, BP75:Dec 75:591

Furrow Irrigation
Design of Irrigation Runoff Recovery Systems, Glen E. Stringham and Safa N. Hamad, IR3:Sept 75:209:11569

Gabions
Gabions, Perforated Pipe and Gravel Serve as Fish Screens, Reuben E. Schmidt and Kenneth R. McSwain, CE:May 76:73

Game Theory
CONSTRUCTO — An Interactive Gaming Environment, Daniel W. Halpin, CO1:Mar 76:145:11969
A Heuristic Game for Material Selection in Structural Design Using the Hybrid Computer, Rick R. Evans, Subhash C. Anand and Myron Spector, Preprint No.2737, Sept 76, 25pp.

Gas Flow
Control of Gas Flow from Sanitary Landfills, Houshang Esmaili, EE4:Aug 75:555:11525

Gaskets
A Fail-Safe Subaqueous Concrete Sewer, Gerald G. Emerson, CE:Sept 75:77

Gasoline Shortages
Effect of Energy Shortage and Land Use on Auto Occupancy, Jahanbakhsh Behnam and Robert E. Beglinger, TE2:May 76:255:12142

Gas Pipelines
Assessment of Environmental Impact on the Aquatic Environment with Limited Field Data, Paul E. Flatt and Charles D.D. Howard, IR76:July 76:435
LNG Terminals, Lloyd J. Weverka and Charles J. Lord, OE75:June 75:732

Gas Scrubbing
Flue Gas Scrubbing at Eddystone Station, George Kotnick, Preprint No.2779, Sept 76, 24pp.

Gas Storage
Concrete Barge of First Totally Offshore LPG Facility, Arthur R. Anderson, CE:Apr 76:58
LNG Terminals, Lloyd J. Weverka and Charles J. Lord, OE75:June 75:732
Pioneer Offshore LNG Terminal, Joseph Peraino and William R. Rogers, CE:Apr 76:82
Subsurface Environment—Private Property or Public Domain?, William R. Walker and William E. Cox, HY11:Nov 74:1699:10958

Gastrointestinal Diseases
Disease Risks of Occupational Exposure to Sewage, C. Scott Clark, Edward J. Cleary, Gilbert M. Schiff, Clavin C. Linneman, Jr., John P. Phair and Terrence M. Briggs, EE2:Apr 76:375:12038

Gas Wells
Technique to Develop Atlantic OCS Oil and Gas, W. B. Bleakley, OE75:June 75:830

Gate Control
Automated Valves for Surface Irrigation Pipelines, Allan S. Humpherys and Robert L. Stacey, IR2: June 75:95:11380

Gates
Cavitation Control by Aeration of High-Velocity Jets, Glenn L. Beichley and Danny L. King, HY7:July 75:829:11462
Construction of Grand Coulee Third Power Plant, Donald J. Duck, CO4:Dec 75:869:11774
Discharge Computations at River Control Structures, Dannie L. Collins, HY7:July 76:845:12237
Flow Control and Transients in the California Aqueduct, Haywood C. Dewey, Jr. and Welby R. Madsen, IR3:Sept 76:335:12434
Flow-Induced Vibration of Vertical-Lift Gate, J. David Hardwick, HY5:May 74:631:10546
Fluid-Dynamic Excitation Involving Flow Instability, Wallace W. Martin, Eduard Naudascher and Mahadevan Padmanabhan, HY6:June 75:681:11361
A Geomorphic Study of Pool 25 in the Upper Mississippi River, Michael A. Stevens, Stanley A. Schumm and Daryl B. Simons, WW76:Aug 76:1655
Pressure Fluctuations in Submerged Jump, S. Narasimhan and V. P. Bhargava, HY3:Mar 76:339: 12004
Thames Barrier Project, P. A. Cox, P. J. Clark and G. Miller-Richards, WW76:Aug 76:852

Geodesy
Arctic Refraction Study, Gerald W. Johnson, SU1: Dec 76:1:12602
A Decade of Research in Surveying and Mapping, Morris M. Thompson, SU1:Oct 75:1:11626
Marine Geodesy — Precise Ocean Surveys, Narendra K. Saxena, SU1:Oct 75:73:11631
Ocean-Bottom Control Net-Unit Configuration, Narendra K. Saxena and Dimitrios P. Xirodimas, SU1:Dec 76:53:12642

Geodetic Surveys
Control Densification by Analytic Photogrammetry, Wesley V. Hull, SU1:Oct 75:11:11624
Electro-Optical Short-Range Surveying Instruments, Narendra K. Saxena, SU1:Oct 75:137:11630
History of Geodetic Networks, James R. Plasker, SU1:Dec 76:21:12612
New Adjustment of North American Datum and Surveyor, John D. Bossler, William E. Stephens, James R. Plasker, Wesley V. Hull and Douglas R. Lee, SU1:Oct 75:115:11657

Geodimeters
Simultaneous Geodimeter and Tellurometer Distances, Wolfgang M. Gopfert, SU1:Oct 75:89: 11623

Geohydrologic Units
Determining Optimal Well Discharge, Otto J. Helweg, IR3:Sept 75:201:11566

Geological Faults
"Geological Hazards," by B.A. Bolt, W.L. Horn, G.A. Macdonaid, and R.F. Scott. (Book Review), Richard L. Meehan, CE:May 76:39

Geologic Investigations
North Sea Oil-Water Mix, Roney A. Heinz, CE:Apr 75:70

Geology
Coring the Deep Oceans for Science, Robert R. Knapp and Valdemar F. Larson, OE75:June 75:784
Foundation of the Sirikit Powerhouse, James D. Gill and Leib Wolofsky, GT76:Aug 76:82
Generalized Cap Model for Geological Materials, Ivan S. Sandler, Frank L. DiMaggio and George Y. Baladi, GT7:July 76:683:12243
Meeting the Earthquake Challenge: California's New Laws, Karl V. Steinbrugge and Henry J. Degenkolb, CE:Feb 75:44
Regime Studies of the Lower Fraser, Alfred John Tamburi, WW76:Aug 76:1680
Sea Cliff Base Erosion, San Diego, California, Louis J. Lee, Charles Pinckney and Charles Bemis, Preprint No.2708, Apr 76, 14pp.
Shih-Kang Dam Multi-Purpose Development Project, Walter Chin Mih, WW76:Aug 76:1630

Geomorphology
Determining Streamflows from Geomorphic Parameters, John F. Orsborn, IR4:Dec 74:455: 10986
A Geomorphic Study of Pool 25 in the Upper Mississippi River, Michael A. Stevens, Stanley A. Schumm and Daryl B. Simons, WW76:Aug 76:1655
Geomorphic Thresholds: An Approach to River Management, Stanley A. Schumm and R. Michael Beathard, WW76:Aug 76:707

Geophysical Surveys
Instrumentation for Wave Induced Pore Pressures, James T. Dette, Vahan Tanal and Joseph A. Fischer, OE75:June 75:355

Georgia
Methodology of Construction Industry Profiling: A Case History, Mark H. Jordan, EI1:Jan 76:67: 11864
Spartina Revegetation on Dredge Spoil in SE Marshes, William M. Dunstan, Gregory L. McIntire and Herbert L. Windom, WW3:Aug 75: 269:11530
Rock Slopes in an Urban Environment (A Case History), David E. Pauls and James G. LaBastie, GT76:Aug 76:182
Runoff Files for Flood Hydrograph Simulation, Alan M. Lumb and L. Douglas James, HY10:Oct 76: 1515:12499
Structural Design and Analysis of Atlanta Center, Ltd., Stephen J. Campbell and Bill L. Gunnin, ST76:Aug 76:771
Use of Depth Profiles for Flow-Model Calibration, Harvey E. Jobson and Thomas N. Keefer, WW76: Aug 76:641

Geotechnical Engineering
Analysis of Backpacked Liners, Sidiq M. Dar and Robert C. Bates, GT7:July 76:739:12242
Analysis of Behavior of Edward Hyatt Power Plant, Fred H. Kulhawy and Richard F. Flanagan, GT3: Mar 75:243:11161
Analysis of Creep Settlement of Pile Foundations, John R. Booker and Harry G. Poulos, GT1:Jan 76: 1:11826
Analysis of Pressuremeter in Strain-Softening Soil, Jean-Herve Prevost and Kaare Hoeg, GT8:Aug 75: 717:11488
Anisotropy in Heavily Overconsolidated Kaolin, Srinath F. Amerasinghe and Richard H.G. Parry, GT12:Dec 75:1277:11808
Application of Stability Analyses to Slope Design, Umakant Dash, NMG:June 76:II-725
Bearing Capacity Analysis of Reinforced Earth Slabs, Jean Binquet and Kenneth L. Lee, GT12:Dec 75: 1257:11793
Bearing Capacity and Settlement of Pile Foundations, George Geoffrey Meyerhof, GT3:Mar 76:195:11962
Bearing Capacity Tests on Reinforced Earth Slabs, Jean Binquet and Kenneth L. Lee, GT12:Dec 75: 1241:11792
Behavior of Bored Piles in Sand, Fadlo T. Touma and Lymon C. Reese, GT7:July 74:749:10651
Behavior of Compacted Soil in Tension, Abbanki V. Gopala Krishnayya, Zdenek Eisenstein and Norbert R. Morgenstern, GT9:Sept 74:1051:10828
Behavior of Drilled Piers under Axial Loading, Lymon C. Reese, Fadlo T. Touma and Michael W. O'Neill, GT5:May 76:493:12135
Caisson Evaluation by Stress Wave Propagation Method, Joav Steinbach and Eben Vey, GT4:Apr 75:361:11245
A Case History of Expansive Claystone Damage, Richard L. Meehan, Michael T. Dukes and Patrick O. Shires, GT9:Sept 75:933:11590

Centrifugal Modelling of Riverbank Failure, Sam Frydman and D. Huw Beasley, GT5:May 76:395:12099
Characteristics Method for Liquefaction of Soils, E. Benjamin Wylie and Victor L. Streeter, NMG:June 76:II-938
Consolidation of Fibrous Peat, Peter L. Berry and Brian Vickers, GT8:Aug 75:741:11493
Consolidation of Thick Beds of Clay, Pasquale De Simone and Carlo Viggiani, NMG:June 76:II-1067
Constrained and Shear Moduli for Finite Element, Vincent P. Drnevich, GT5:May 75:459:11319
Creep of Sand-Ice System, Robert G. Rein, Jr., Vidyutkumar V. Hathi and Cedomir M. Sliepcevich, GT2:Feb 75:115:11134
Curved Diaphragm Cellular Cofferdams, Jerome J. Cushing and Robert M. Moline, GT10:Oct 75:1055:11669
Cyclic Loading Liquefaction of Gravelly Soils, Robert T. Wong, H. Bolton Seed and Clarence K. Chan, GT6:June 75:571:11396
Cyclic Triaxial Strength of Standard Test Sand, Marshall L. Silver, Clarence K. Chan, Richard S. Ladd, Kenneth L. Lee, Drew A. Tiedemann, Frank C. Townsend, Julio E. Valera and James H. Wilson, GT5:May 76:511:12145
Deformation of Deep Excavations, Dieter Stroh and Herbert Breth, NMG:June 76:II-686
Design of Transit Structures for Urban Areas, David G. Hammond and Drupad B. Desai, TE1:Feb 76:1:11918
Differential Settlement of Buildings, Rebecca Grant, John T. Christian and Erik H. Vanmarcke, GT9:Sept 74:973:10802
Diffusion of Water under Subfreezing Temperature, Jai P. Gupta and Stuart W. Churchill, TN: GT2:Feb 76:185:11885
Directional Drying Rates for Anisotropic Clays, Jack L. Rosenfarb, M. Salah Abdelhamid and Raymond J. Krizek, TN: GT2:Feb 76:188:11885
Dynamic Response of Embedded Machine Foundations, Kenneth H. Stokoe, II and Frank E. Richart, Jr., GT4:Apr 74:427:10499
Dynamic Response of Tropical Marine Limestone, Zen Yang and Allen W. Hatheway, GT2:Feb 76:123:11893
Dynamic Strength of Hydraulic Fill, Richard L. Meehan, TN: GT6:June 76:641:12169
Dynamic Triaxial and Simple Shear Behavior of Sand, Ted K. Park and Marshall L. Silver, GT6:June 75:513:11347
Earth Pressure on Precast Panel Retaining Wall, Harry M. Coyle and Richard E. Bartoskewitz, GT5:May 76:441:12113
Earth Slope Reliability by a Level-Crossing Method, J. Morla Catalan and C. Allin Cornell, GT6:June 76:591:12214
Effective Stress-Strain-Strength Model for Soils, Jean-Herve Prevost and Kaare Hoeg, GT3:Mar 75:259:11157
Effect of Catalyst in Soil-Resin Stabilization, Dalim K. Majumdar, GT6:June 75:531:11385
Effect of Drains on Pressures Below Structures, Amrik S. Chawla, GT1:Jan 76:15:11827
Effects of Deforestation of Slopes, Colin E. Brown and Maw S. Sheu, GT2:Feb 75:147:11141
Elastoplastic Stress-Strain Theory for Cohesionless Soil, Poul V. Lade and James M. Duncan, GT10:Oct 75:1037:11670
Electro-Osmosis Applied to Unstable Embankment, Brian A. Chappell and Peter L. Burton, GT8:Aug 75:733:11495
Electro-Osmotic Consolidation of Soils, Tai-Yeu Wan and James K. Mitchell, GT5:May 76:473:12156
Embankment on Soft and Sensitive Clay Foundation, Oscar Dascal and Jean-Pierre Tournier, GT3:Mar 75:297:11193
End Effects on Stability of Cohesive Slopes, Mohsen M. Baligh and Amr S. Azzouz, GT11:Nov 75:1105:11705
Evaluation of Stress Cell Performance, Raymond J. Krizek, M. Hassan Farzin, Anwar E.Z. Wissa and R. Torrence Martin, GT12:Dec 74:1275:11030
Exit of Ground Waters on Drainage Boundaries, Boris S. Browzin, GT2:Feb 76:159:11909
Failure of Anchored Sheet Pile Walls, Bengt B. Broms and Hakan Stille, GT3:Mar 76:235:12000
Failures in Limestones in Humid Subtropics, George F. Sowers, GT8:Aug 75:771:11521
Field Measurement of Permeability in Soil and Rock, Victor Milligan, GT75:June 75:II-3
Finite Element Analysis of Piles in Viscoelastic Soil, John R. Booker and Harry G. Poulos, NMG:June 76:I-425
Finite Element Analysis of Piles in Expansive Media, Joram M. Amir and M. Sokolov, GT7:July 76:701:12256
Full-Scale Lateral Load Tests of Pile Groups, Jai B. Kim and Robert J. Brungraber, GT1:Jan 76:87:11849
Fundamentals of Liquefaction under Cyclic Loading, Geoffrey R. Martin, W. D. Liam Finn and H. Bolton Seed, GT5:May 75:423:11284
Generalisation of Sequential Nonlinear Analysis: A Study of Rockfill Dam with Joint Elements, Heramb D. Sharma, Gyan C. Nayak and J. B. Maheshwari, NMG:June 76:II-662
Generalized Cap Model for Geological Materials, Ivan S. Sandler, Frank L. DiMaggio and George Y. Baladi, GT7:July 76:683:12243
Geotechnical Engineering—and the Law, CE:July 76:18
Geotechnical Input for Deep-Water Pipelines, Bing C. Yen, R. Leonard Allen and Harry H. Shatto, OE75:June 75:504
Half a Century of Soil Mechanics—Some Thoughts for the Future in the Light of the Past, Gregory P. Tschebotarioff, EI3:July 76:321:12251
Heat Transfer in Soil-Water-Ice Systems, Aditya Mohan, GT2:Feb 75:97:11123
Identification and Nature of Dispersive Soils, James L. Sherard, Lorn P. Dunnigan and Rey S. Decker, GT4:Apr 76:287:12052
Importance of Groove Spacing in Tunnel Boring Machine Operations, Parviz F. Rad, GT9:Sept 75:949:11589
In-situ Shear Test for Rock Fills, Surendra P. Jain and Ramesh C. Gupta, GT9:Sept 74:1031:10823
In Situ Soils Measuring Devices — Part II, CE:Dec 75:73
Integrated Study of Reinforced Earth-I: Theoretical Formulation, Karl M. Romstad, Leonard R. Herrmann and Chih-Kang Shen, GT5:May 76:457:12144
Integrated Study of Reinforced Earth—II: Behavior and Design, Chih-Kang Shen, Karl M. Romstad and Leonard R. Herrmann, GT6:June 76:577:12210
Karl Terzaghi and the Chicago Subway, Ralph B. Peck, EI4:Oct 75:477:11668
Large-Scale Model Test of Drilled Pier in Sand, Samuel P. Clemence and William F. Brumund, GT6:June 75:537:11369
Lateral Load-Deflection Prediction for Pile Groups, Harry G. Poulos, GT1:Jan 75:19:11061
Lateral Loading of Deep Foundations in Stiff Clay, Lymon C. Reese and Robert C. Welch, GT7:July 75:633:11456
Liquefaction and Cyclic Mobility of Saturated Sands, Gonzalo Castro Salas, GT6:June 75:551:11388
Liquefaction during 1906 San Francisco Earthquake, T. Leslie Youd and Seena N. Hoose, GT5:May 76:425:12143
Liquefaction Potential at Ekofisk Tank in North Sea, Kenneth L. Lee and John A Focht, Jr., GT1:Jan 75:1:11054
Measurement of In Situ Strength, John H. Schmertmann, GT75:June 75:II-57
Mica Dam Embankment Stress Analysis, Nigel A. Skermer, GT3:Mar 75:229:11162
New Design Procedure for Stability of Soft Clays, Charles C. Ladd and Roger Foott, GT7:July 74:763:10664
New Rheological Model for Soil Behavior, Fujiya Komamura and Rodney J. Huang, GT7:July 74:807:10675

Nonlinear Settlement Analysis by Finite Element, Leonard Domaschuk and Palaniappan Valliappan, GT7:July 75:601:11423
Numerical Design-Analysis for Piles in Sands, Chandrakant S. Desai, GT6:June 74:613:10617
Numerical Treatment of Some Geomechanical Problem Areas in Oil and Natural Gas Production, Jan Geertsma, NMG:June 76:II-759
One-Dimensional Soil Transients by Characteristics, E. Benjamin Wylie and Victor L. Streeter, NMG: June 76:I-151
Performance of Tied-Back Walls in Clay, G. Wayne Clough and Yuet Tsui, GT12:Dec 74:1259:11028
Photoelastic Analysis of a Cofferdam, Naveed K. Burki and Rowland Richards, Jr., GT2:Feb 75:129: 11135
Pinhole Test for Identifying Dispersive Soils, James L. Sherard, Lorn P. Dunnigan, Rey S. Decker and Edgar F. Steele, GT1:Jan 76:69:11846
Planning and Performing Compaction Grouting, James Warner and Douglas R. Brown, GT6:June 74:653:10606
Pneumatic Sinusoidal Loading System, Clarence K. Chan and John Paul Mulilis, TN: GT3:Mar 76:277: 11953
Pore and Eroding Fluid Influences on Surface Erosion on Soil, Kandiah Arulanandan, Paripurnanandan Loganathan and Ray B. Krone, GT1:Jan 75:51:11078
Pore Pressures Near Moving Underwater Slope, Karel L. Meijer and Adriaan G. van Os, GT4:Apr 76:361:12021
Pore-Water Pressure Changes during Soil Liquefaction, H. Bolton Seed, Philippe P. Martin and John Lysmer, GT4:Apr 76:323:12074
Prediction of Downdrag Forces in End-Bearing Piles, Harry G. Poulos and Edward H. Davis, GT2:Feb 75:189:11144
Probabilistic Analysis and Design of a Retained Wall, Kaare Hoeg and Ramesh P. Murarka, GT3:Mar 74: 349:10436
Projectile Penetration of Elastic-Plastic Earth Media, Lewis Thigpen, GT3:Mar 74:279:10414
Properties of Soil in the San Fernando Hydraulic Fill Dams, Kenneth L. Lee, H. Bolton Seed, Izzat M. Idriss and Faiz I. Makdisi, GT8:Aug 75:801:11527
Quasi-Static Deep Penetration in Clays, Mohsen M. Baligh and Ronald F. Scott, GT11:Nov 75:1119: 11706
Reducing Negative Friction with Bitumen Slip Layers, Alphonsus I. M. Claessen and Endre Horvat, GT8:Aug 74:925:10764
Relationship of Soil Moisture to the Dielectric Property, Ernest T. Selig and Sundru Mansukhani, GT8:Aug 75:755:11517
Review of Expansive Soils, Gerald J. Gromko, GT6: June 74:667:10609
The Role of Geotechnical Engineering in Land Use Planning, Ronald C. Hirschfeld, EFEEC:Aug 75:65
Safety Factor Evaluation for Single Piles in Sand, James Neil Kay, GT10:Oct 76:1093:12494
Sanitary Landfill Settlement Rates, Bing C. Yen, GT5:May 75:475:11335
Seepage through Opening in Cutoff Wall Under Weir, Suresh P. Brahma, GT3:Mar 75:329:11204
Seismic Design of Reinforced Earth Walls, Gregory N. Richardson and Kenneth L. Lee, GT2:Feb 75: 167:11143
Seismic Instrumentation of Dams, Bruce A. Bolt and Donald E. Hudson, GT11:Nov 75:1095:11697
Settlement of Sands under Multidirectional Shaking, Robert M. Pyke, H. Bolton Seed and Clarence K. Chan, GT4:Apr 75:379:11251
Settlement of Thawing Embankment, Bernard D. Alkire, Wilbur M. Haas and James J. Botz, TN: GT8:Aug 76:877:12287
Shallow Anchor Resistance to Eccentric Uplift Load, Braja M. Das and Gerald R. Seeley, TN: GT4:Apr 76:387:12019
Shearing Strength of Kaolinite, Illite, and Montmorillonite, Roy E. Olson, GT11:Nov 74: 1215:10947
Sheet Pile Interlock Tension-Probabilistic Design, James Neil Kay, GT5:May 76:411:12122
Side Friction in Model Retaining-Wall Experiment, Peter L. Bransby and Ian A.A. Smith, GT7:July 75: 615:11447
Site Investigation with Static Cone Penetrometer, Robert Alperstein and Samuel A. Leifer, GT5:May 76:539:12154
The Slides in the San Fernando Dams During the Earthquake of February 9, 1971, H. Bolton Seed, Kenneth L. Lee, Izzat M. Idriss and Faiz I. Makdisi, GT7:July 75:651:11449
Software Coordination in Geotechnical Engineering, Robert L. Schiffman and David M. Jubenville, NMG:June 76:II-1228
Soil Liquefaction by Torsional Simple Shear Device, Isao Ishibashi and Mehmet A. Sherif, GT8:Aug 74: 871:10752
Some Geotechnical Aspects of Marginal Wharf Design, William Enkeboll and Vernon A. Smoots, Preprint No.2699, Apr 76, 24pp.
Stability of Embankment on Clay, Tien H. Wu, William B. Thayer and Sheng S. Lin, GT9:Sept 75: 913:11584
Stability of Slopes by Logarithmic-Spiral Method, Yang H. Huang and Craig M. Avery, GT1:Jan 76: 41:11838
Stability of Vertical Corner Cut with Concentrated Surcharge Load, Max W. Giger and Raymond J. Krizek, GT1:Jan 76:31:11842
State-of-the-Art of Geothermal Reservoir Engineering, Patrick K. Takahashi, Bill H. Chen, Ken I. Mashima and Arthur S. Seki, PO1:July 75: 111:11455
Static Stresses by Linear and Nonlinear Methods, Kenneth L. Lee and Izzat M. Idriss, GT9:Sept 75: 871:11542
Statistical Quality Control at Kastraki Earth Dam, Panaghiotis C. Kotzias and Aris C. Stamatopoulos, GT9:Sept 75:837:11552
Statistics of Liquefaction and SPT Results, John T. Christian and William F. Swiger, GT11:Nov 75: 1135:11701
Stiffness Coefficients for Embedded Footings, Gordon R. Johnson, Paul P. Christiano and Howard I. Epstein, GT8:Aug 75:789:11522
Strain Rate Behavior of Compacted Silt, Nikhilesh Roy and Parth Sarathi, GT4:Apr 76:347:12024
Strength of One Dimensionally Consolidated Clays, Adel S. Saada and Gary F. Bianchini, GT11:Nov 75:1151:11707
Stress-Deformation-Time Behavior of Dredgings, Abdelsalam M. Salem and Raymond J. Krizek, GT2:Feb 76:139:11917
Stresses on Shallow Circular Pipe by Transformed Section, Rowland Richards, Jr. and Jagdish S. Agrawal, GT6:June 74:637:10631
Stress-Path Dependent Deformation Moduli of Clay, Yudhbir and A. Varadarajan, GT3:Mar 75:315: 11198
Stress-Path Independent Behavior of Cohesionless Soil, Poul V. Lade and James M. Duncan, GT1:Jan 76:51:11841
Stress-Strain Behavior of Sand, Vijay K. Khosla and Tien H. Wu, GT4:Apr 76:303:12079
Stress-Strain Properties of Compacted Clays, David E. Daniel and Roy E. Olson, GT10:Oct 74:1123: 10869
Studies on Anchored Flexible Walls in Sand, Thomas H. Hanna and Ibrahim I. Kurdi, GT10:Oct 74:1107: 10854
Subsidence Over Soft Ground Tunnel, Roger A. Butler and Delon Hampton, GT1:Jan 75:35:11074
Tehri Rockfill Dam, B. V.K. Lavania, GT9:Sept 75: 963:11587
Temporary Excavation in Varved Clay, Donald J. Murphy, G. Wayne Clough and Robert S. Woolworth, GT3:Mar 75:279:11179
Testing Procedure Effects on Dynamic Soil Behavior, Marshall L. Silver and Ted K. Park, GT10:Oct 75: 1061:11671
Test Loading of Piles and New Proof Testing Procedure, Bengt H. Fellenius, GT9:Sept 75:855: 11551

Time-Dependent Increase in Shear Modulus of Clay, Donald G. Anderson and Richard D. Woods, GT5: May 76:525:12147
Torsional Response of Piles, Harry G. Poulos, GT10: Oct 75:1019:11629
Uniform Placement of Sand, Wayne A. Bieganousky and William F. Marcuson, III, GT3:Mar 76:229: 11985
Uplift Capacity of Group Piles in Sand, Braja M. Das, Gerald R. Seeley and Jonathan E. Smith, TN: GT3:Mar 76:282:11953
Uplift Resistance of Piles in Sand, Ibrahim H. Sulaiman and Harry M. Coyle, TN: GT5:May 76: 559:12127
Volume Changes in Models of Jointed Rock, Edwin T. Brown, TN: GT3:Mar 76:273:11953
Yielding of Sand in Plane Strain, Sam Frydman, GT5:May 74:491:10540

Geothermal Energy
Concrete in Water Resource and Energy Development, Harold G. Arthur, Preprint No.2741, Sept 76, 30pp.
Hydraulic Fracture and Heat Extraction from Hot Dry Rock Masses: A Finite Element Approach, S. Nemat-Nasser, Zdenek P. Bazant and H. Ohtsubo, NMG:June 76:1-79

Geothermal Powerplants
State-of-the-Art of Geothermal Reservoir Engineering, Patrick K. Takahashi, Bill H. Chen, Ken I. Mashima and Arthur S. Seki, PO1:July 75: 111:11455

Girders
Analysis of Fatigue of Welded Crane Runway Girders, David A. Demo and John W. Fisher, ST5: May 76:919:12106
A Brief History of the Steel Joist Industry, Robert C. Macomber, Preprint No.2758, Sept 76, 12pp.
Construction of Large Prestressed Concrete Girders, J. Neil Mustard and Ram S. Ghosh, CO4:Dec 74: 507:10994
Experimental Bridge Girder of Reinforced Plastic, Fred C. McCormick, TE1:Feb 75:47:11104
Helicoidal Girders, Himat T. Solanki, TN: ST4:Apr 76:869:12076
Optimization of Unstiffened Hybrid Beams, Ken P. Chong, ST2:Feb 76:401:11907
Plastic Design of Web Openings in Steel Beams, Marvin A. Larson and Kirit N. Shah, ST5:May 76: 1031:12155
Practical Applications of Structural Optimization, George G. Goble and Fred Moses, ST4:Apr 75:635: 11267
Prestressed Composite Continuous Bridge Girder, Subhash C. Anand and Clarence J. Fennell, III, TN: ST1:Jan 76:313:11821
Rio-Niteroi Bridge Features Record Girder Span, Gerald F. Fox and H. James Graham, CE:Apr 76: 86
Theoretical Analysis of Curved Girder Bridges, Terry R. Douglas and Samuel C. Gambrell, Jr., EM5:Oct 74:991:10871
Wheel Load Stress Concentrations on Crane Runway Girders, G. J.K. Asmis, ST76:Aug 76:1005

Glaciers
Sediment Discharge by Glacier-Fed Rivers in Alaska, Craig H. Everts, WW76:Aug 76:907

Glass
Window Glass Failures in Windstorms, Joseph E. Minor and W. Lynn Beason, ST1:Jan 76:147:11834

Glass Fiber Reinforced Plastics
Plastic Tower Solves Radar Interference, Paul A. Gossen and Richard L. Tomasetti, CE:Dec 76:46

Glass Fibers
Construction Helmet Response Under Severe Impact, Werner Goldsmith, CO2:June 75:335:11349
Experimental Bridge Girder of Reinforced Plastic, Fred C. McCormick, TE1:Feb 75:47:11104
Fiber Reinforced Concrete Extrusion, Ronald F. Zollo, ST12:Dec 75:2573:11798
Stresses in GRP Cylinders with Radial Line Load, Fred C. McCormick and Richard T. Hunt, EM4: Aug 75:417:11520

Glass Reinforced Plastics
Stresses in GRP Cylinders with Radial Line Load, Fred C. McCormick and Richard T. Hunt, EM4: Aug 75:417:11520

Glue
Full-Scale Tests on Tapered and Curved Glulam Beams, Vijaya K.A. Gopu and James R. Goodman, ST12:Dec 75:2609:11794

Government
Interaction Relationship of Community Development with Government Programs, John J. Wilder, EI4: Oct 76:471:12502

Government Agencies
The Agency, The Owner, and The Engineer, in Texas, Noble J. Campbell, EFRLD:Sept 75:99
Changes in the Private Sector, David Stahl, UP1:Aug 76:25:12352
Dam Safety — Texas Style, Joe D. Carter, EFRLD: Sept 75:79
Evolving National Water Policies, Gary D. Cobb, EI3:July 75:375:11427
Fifty Years of Construction Law, Robert A. Rubin, CO4:Dec 75:703:11758
Integrated Grant Administration Program, Roland M. Lewis and Johannes W. Kurz, TE1:Feb 75:155: 11110
Legal Perspective on Water Quality Management, Douglas R. Blazey, HY5:May 75:595:11320
New Institutions for Joint Development, Rodney E. Engelen, UP1:May 75:11:11288
Past and Future of Contract Administration, Woodrow W. Wilson, CO3:Sept 75:559:11560
Planning and Implementation under Section 208, William C. Lienesch and Gerald A. Emison, WR2: Nov 76:283:12556
Problems in Integrating Water Programs, Eugene T. Jensen, HY3:Mar 75:467:11202
Recent Legislation Impacting on Dredging Projects, William L. Black, Preprint No.2727, Apr 76, 23pp.
A Review of Electronic Computing for Civil Engineering Within the Federal Government, David R. Schelling, Preprint No.2818, Sept 76, 29pp.
Water Quality Law in Federal Republic of Germany, Klaus Seifert and T. Clark Lyons, WR1:Apr 76:23: 12071
Waters of the United States, William L. Black, DIEE: Jan 76:10
2020 Hindsight; Another Fifty Years of Irrigation?, Daniel A. Dreyfus, IR2:June 75:87:11363

Governmental Role
US Water Cleanup Program Speeds Up—But Still Much Red Tape, Eugene E. Dallaire, CE:Aug 75:71

Government Policies
Interaction Relationship of Community Development with Government Programs, John J. Wilder, EI4: Oct 76:471:12502

Gradation
Stability of Channel Beds by Armoring, William C. Little and Paul G. Meyer, HY11:Nov 76:1647: 12519

Grading (Earthwork)
Gap-Graded Concrete for Paving Construction, Ram Kinkar Ghosh and Mukul Ranjan Chatterjee, CO1: Mar 76:227:11988

Gradually Varied Flow
Exact Solution of Gradually Varied Flow, Mohammad Akram Gill, HY9:Sept 76:1353:12406

Flow at Grade-Break from Mild to Steep Slopes, Richard G. Weyermuller and M. Gamal Mostafa, HY10:Oct 76:1439:12458

Graduate Study
Education and Training in Water Resources Planning, Alvin S. Goodman, WR2:Nov 76:209:12555

Grants
Grantspersonship Roundtable Minutes, Ira N. Pierce, BP75:Dec 75:587
Integrated Grant Administration Program, Roland M. Lewis and Johannes W. Kurz, TE1:Feb 75:155: 11110
Productivity and the Construction Grants Program for Wastewater Treatment Works: An EPA View, Harold P. Cahill, Jr., PROD:Aug 76:205

Granular Materials
Arrangements of Separate Elastic Bodies, Colin B. Brown, EM6:Dec 76:971:12635
Massive Compaction of Granular Soil — How We Stand, Henry W. Janes and Robert D. Anderson, Preprint No.2777, Sept 76, 28pp.
Nonlinear Characterization and Analysis of Sand, Hon-Yim Ko and Raymond M. Masson, NMG: June 76:I-294

Graphical Analysis
Seepage through Opening in Cutoff Wall Under Weir, Suresh P. Brahma, GT3:Mar 75:329:11204

Graphic Arts
Computer-Aided Design of Urban Transit Systems, Jerry B. Schneider, Claus D. Gehner, Dennis Porter and James Clark, TE4:Nov 74:943:10936

Graphite Composites
Structural Design of Large Space Telescope, Gerald W. Arnts, Jr., TE2:May 76:363:12132

Graphs
Design Graphs for Activated Sludge Process, Michael D. Mynhier and C. P.Leslie Grady, Jr., EE5:Oct 75:829:11659
Generalized Nomographic Solution of Hooghoudt Equations, John G. Sakkas, IR1:Mar 75:21:11182

Graphs (Charts)
Conceptual RMC/Time Synthesis, Marvin Gates and Amerigo Scarpa, CO2:June 76:307:12181
Dimensionless Solution of Dam-Break Flood Waves, John G. Sakkas and Theodor Strelkoff, HY2:Feb 76:171:11910
Nonlinear Analysis of Foundation Vibrations, Mete Oner and Nilmar Janbu, NMG:June 76:II-1025
Synthesis of Finite Element Analysis of Culverts, John F. Abel and James Neil Kay, NMG:June 76: II-873

Gravel
Gabions, Perforated Pipe and Gravel Serve as Fish Screens, Reuben E. Schmidt and Kenneth R. McSwain, CE:May 76:73

Gravel Pits
Use of Abandoned Gravel Pits as Spreading Grounds — Experience in Los Angeles County, Irving Sherman, IR76:July 76:461

Gravels
Cyclic Loading Liquefaction of Gravelly Soils, Robert T. Wong, H. Bolton Seed and Clarence K. Chan, GT6:June 75:571:11396
Hydraulic and Environmental Effects of Commercial In-Stream Dredging, Paul G. Mayer, DIEE:Jan 76: 947
Study of Artificial Cutoffs on Gravel-Bed Rivers, Dale I. Bray and Andrew J. Cullen, WW76:Aug 76: 1399

Gravity Irrigation
Economic Pipe Sizing for Gravity Sprinkler Systems, Roland P. Perold, IR2:June 74:107:10583

Gravity Waves
Gravity Waves Propagated over Permeable Bottom, Stanislaw R. Massel, WW2:May 76:111:12107
A Numerical Model of the Time-Dependent, Three-Dimensional Structure of Circulation in Large Lakes, Ralph Ta-shun Cheng, Preprint No.2692, Apr 76, 27pp.
Statistics of Random Wave Field, Keikhosrow Pajouhi and Chi C. Tung, WW4:Nov 75:435:11734

Great Britain
British New Towns and the Civil Engineer, Tom Walsh, CE:Mar 75:84
Thames Barrier Project, P. A. Cox, P. J. Clark and G. Miller-Richards, WW76:Aug 76:852

Great Lakes
Extreme Wave Heights for Cleveland Harbor, D. T. Resio, OE75:June 75:62
Lake Erie Airport Study — A Status Report, Herbert R. Crawford, Preprint No.2635, Apr 76, 27pp.
Pressure Effects on Great Lakes Vertical Control, Frank H. Quinn, SU1:Dec 76:31:12605
Public Participation in Great Lakes Water Levels Regulation: Further Findings from the Public Hearing Held by the I.J.C. in 1973, A. P. Grima and C. Dufournaud, IR76:July 76:418

Greece
Statistical Quality Control at Kastraki Earth Dam, Panaghiotis C. Kotzias and Aris C. Stamatopoulos, GT9:Sept 75:837:11552

Greens Function
A Numerical Solution for Viscoelastic Half Planes, Gautam Dasgupta, EM4:Aug 76:601:12325
On Green's Function Techniques for Solutions of Floating Body Problems, Rong-Tai Ho and Ami Harten, OE75:June 75:939

Grid Systems
Analysis of Some Double Layer Grids, Andrew G. Collings, ST8:Aug 76:1591:12342
Laplacian-Isoparametric Grid Generation Scheme, Leonard R. Herrmann, EM5:Oct 76:749:12456
Macroapproach for Ribbed and Grid Plate Systems, Hota V.S. GangaRao, Amr Abd Elmeged and Virendra K. Chaudhary, EM1:Feb 75:25:11130

Grillage Footings
Optimal Slabs and Grillages of Constrained Geometry, George I.N. Rozvany, Chinappa Gangadharaiah and Robin D. Hill, EM6:Dec 75: 755:11797

Ground Effect
Models of Geological Materials in Ground Shock, Ivan S. Sandler and Melvin L. Baron, NMG:June 76:I-219

Ground Water
Aquifer Parameter Identification, William Wen-Gong Yeh, HY9:Sept 75:1197:11582
Comparison of Numerical Schemes, John C. Bruch, Jr. and Roland W. Lewis, NMG:June 76:I-115
Design of Transit Structures for Urban Areas, David G. Hammond and Drupad B. Desai, TE1:Feb 76:1: 11918
Determining Optimal Well Discharge, Otto J. Helweg, IR3:Sept 75:201:11566
The Equivalent Radius of a Source in Numerical Models of Groundwater Flow, Iichiro Kono, NMG: June 76:II-1145
Exit of Ground Waters on Drainage Boundaries, Boris S. Browzin, GT2:Feb 76:159:11909
Fate of Wastewater Bacteria and Viruses in Soil, Charles P. Gerba, Craig Wallis and Joseph L. Melnick, IR3:Sept 75:157:11572
Generalized Nomographic Solution of Hooghoudt Equations, John G. Sakkas, IR1:Mar 75:21:11182
Ground-Water Pollution Near a Landfill, William E. Kelly, EE6:Dec 76:1189:12609
Ground-Water Recharge Simulation, Abnish C. Amar, HY9:Sept 75:1235:11588

Ground-Water's Role in Water Quality Management, John O. Osgood, HY3:Mar 75:517:11159
Hydrodynamics of Perched Mounds, Richard R. Brock, HY8:Aug 76:1083:12305
Implementation of Interstate Water Quality Plan, Cecil H.J. Hull, HY3:Mar 75:495:11177
Modeling the Chipuxet Ground Water Aquifer, William E. Kelly, NMG:June 76:II-1188
Numerical Solution of Boussinesq Equation, Sita Ram Singh and C. M. Jacob, EM5:Oct 76:807:12463
Optimal Pumping for Aquifer Dewatering, Eduardo Aguado, Irwin Remson, Mary F. Pikul and Will A. Thomas, HY7:July 74:869:10639
Oxnard-Hueneme Pipeline, Operation and Water Quality Problems, Richard A. Smith, Preprint No.2683, Apr 76, 8pp.
Private Constraints on Ground-Water Contamination, William R. Walker and William E. Cox, HY10:Oct 75:1333:11665
Pumping of Aquifer with Viscoelastic Properties, Wilfried Brutsaert and M. Yavuz Corapcioglu, HY11:Nov 76:1663:12541
Radial Dispersion in Ground-Water Flow, Bruce W. Hunt, EM6:Dec 74:1117:10998
Saturated and Unsaturated Flow to Parallel Drains, R. Wayne Skaggs and Yau-K. Tang, IR2:June 76:221:12199
The Sinking of the Amsterdam Metro, David Halperin, CE:Sept 75:92
South Platte River Flow Correlations, Robert E. Glover, IR3:Sept 75:175:11563
Subsurface Environment—Private Property or Public Domain?, William R. Walker and William E. Cox, HY11:Nov 74:1699:10958
Transient Aquifer Flows by Characteristics Methods, E. Benjamin Wylie, HY3:Mar 76:293:12001
Transient Dispersion in Uniform Media Flow, Hung Tao Shen, HY6:June 76:707:12202
Wasterwater Reclamation and Recharge, Bay Park, N.Y., John Vecchioli, James A. Oliva, Stephen E. Ragone and Henry F.H. Ku, EE2:Apr 75:201:11232
Water for the Valley of the Sun, William W. Reedy, Preprint No.2782, Sept 76, 27pp.
Water Quality and Aquitard Permeability, James H. Hardcastle and James K. Mitchell, IR2:June 76:205:12203

Groundwater Barriers
Albany South Mall: Largest State Government Complex, John C. Byron, CE:May 76:66

Groundwater Flow
The Equivalent Radius of a Source in Numerical Models of Groundwater Flow, Iichiro Kono, NMG:June 76:II-1145
Exit of Ground Waters on Drainage Boundaries, Boris S. Browzin, GT2:Feb 76:159:11909
Site Evaluation and Design of Seepage Fields, Kent A. Healy and Rein Laak, EE5:Oct 74:1133:10882
Transient Aquifer Flows by Characteristics Methods, E. Benjamin Wylie, HY3:Mar 76:293:12001
Water Movement in Soil from Trickle Source, Ahmed Y. Hachum, Jose F. Alfaro and Lyman S. Willardson, IR2:June 76:179:12204

Groundwater Potential
Irrigation Development in Bangladesh, Stephen V. Allison and Kazi F. Jalal, IR1:Mar 74:69:10394

Groundwater Quality
Solution for Radial-Flow with Nonlinear Adsorption, Surendra P. Gupta and Robert A. Greenkorn, EE1:Feb 76:87:11901

Ground Water Recharge
Ground-Water Recharge Simulation, Abnish C. Amar, HY9:Sept 75:1235:11588
Hydrodynamics of Perched Mounds, Richard R. Brock, HY8:Aug 76:1083:12305
Local Land Use Control Over Critical Areas, Charles Thurow, CE:Sept 75:73
Use of Abandoned Gravel Pits as Spreading Grounds — Experience in Los Angeles County, Irving Sherman, IR76:July 76:461

Ground Wave Propagation
Design Spectra for Nuclear Power Plants, Ricardo A. Guzman and Paul C. Jennings, PO2:Nov 76:165:12521

Grout
Pressure Grouting Foundation on Teton Dam, Peter P. Aberle, GT76:Aug 76:245

Grouting
Dewatering Rock for Construction, George F. Sowers, GT76:Aug 76:200
Finite Element Analysis of Grout Propagation, Manfred Wallner and Walter Wittke, NMG:June 76:II-1119
Foundation Treatment for Little Blue Run Dam, Gerald R. Thiers, Larry W. Lobdell and Bernard M. Mihalcin, GT76:Aug 76:283
Future Advances in Soil Placement and Improvement, J. Richard Bell, Preprint No.2775, Sept 76, 19pp.
Planning and Performing Compaction Grouting, James Warner and Douglas R. Brown, GT6:June 74:653:10606
Pressure Grouting Foundation on Teton Dam, Peter P. Aberle, GT76:Aug 76:245
Pueblo Dam - A Bureau of Reclamation First, Harold G. Arthur, CE:July 75:70
Reinforced Earth Bridges Highway Sinkhole, Ronald S. Steiner and Edward J. Trojan, CE:July 75:54
A Stability Study of a Concrete Arch Dam Rock Abutment, Edward C.K. Tom, Nestor T. Mirafuente and Efren Estrella, GT76:Aug 76:264

Growth
Land-Use and Growth Management—A Comment for Professionals, Randall Scott, UP1:Aug 76:73:12359
Use of an EIR Process in Controlling Urban Sprawl, Randolph M. Brodersen and Leonard Ortolano, UP1:Aug 76:199:12358

Growth Projections
Developing and Maintaining Client Relationship in the Marketing of Engineering Services, Arnold Olitt, CE:June 76:66

Growth Rate
Intergovernmental Guidance of Land Use and Growth, Bruce D. McDowell, UP1:Aug 76:15:12319
New Growth Centers—A Role for the Bureau of Reclamation, Victor A. Koelzer, WR2:Nov 76:311:12576

Growth Rates
Population Balance Use in Dilute Impurity Problems, John D. Stevens and Paul M. Schierholz, EE2:Apr 76:337:12034

Guidelines
Computer Input/Output Methods Useful for Engineers, Phoebe A. Miller and Barry A. Scott, ST76:Aug 76:851

Gullies
Geomorphic Thresholds: An Approach to River Management, Stanley A. Schumm and R. Michael Beathard, WW76:Aug 76:707
Soil Erosion and Sediment Transport from Gullies, Robert F. Piest, Joe M. Bradford and George M. Wyatt, HY1:Jan 75:65:11069

Gust Loads
Equivalent Static Wind Loads for Tall Building Design, Emil Simiu, ST4:Apr 76:719:12057
Gust Factors for Hyperbolic Cooling Towers, Mahendra P. Singh and Ajaya K. Gupta, ST2:Feb 76:371:11894

Habitat Improvement
Habitat Development on Dredged Material, Hanley K. Smith, DIEE:Jan 76:856

Habitats
Habitat Development on Dredged Material, Hanley K. Smith, DIEE:Jan 76:856

Hail
Weather Modification for Use in High Plains, Richard A. Schleusener and J. R. Miller, Jr., IR3: Sept 74:339:10816

Half Space
Circular Mats under Arbitrary Loading, Ajoy Banerjee and Ziva D. Jankov, ST10:Oct 75:2133: 11637
Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities, E. D'Appolonia, H. Bolton Seed, Robert V. Whitman, Shih-Lung Chu, Carl J. Costantino, Asadour H. Hadjian, Izzat M. Idriss, John Lysmer, R. Scavuzzo and Milomir Stoykovich, SDNPF:Dec 73:III-19
Forced Vibrations of Strip Footings on Layered Soils, George C. Gazetas and Jose M. Roesset, ST76:Aug 76:115
Soil-Structure Interaction Analyses for Seismic Response, H. Bolton Seed, John Lysmer and Richard N. Hwang, GT5:May 75:439:11318

Hangars
Fifty-Year Development of Naval Facilities Construction, Michael Yachnis, CO1:Mar 75:15: 11175
TWA Hangars of Thin Shell Design, Roney A. Heinz, CE:Jan 75:55

Harbor Facilities
Early Crises in the Port of Boston, James R. Cass, Jr., Preprint No.2774, Sept 76, 25pp.
Effects of Entrance Loss on Harbor Oscillations, Umit Unluata and Chiang C. Mei, WW2:May 75: 161:11287
International Law and Superport Development, Amos C. Dawson, OE75:June 75:1462
The Port of New Orleans in the 18th Century — The Formative Years, Herbert R. Haar, Jr., Preprint No.2783, Sept 76, 15pp.
Port of San Francisco, Robert L. Sloan, Preprint No.2783, Sept 76, 26pp.
Present and Future Trends in Harbor and Port Facilities, Billy E. Smith, Preprint No.2814, Sept 76, 10pp.
Sand Bypassing with Split-Hull Self-Propelled Barge Currituck, W. H. Sanderson, DIEE:Jan 76:163
Shoaling Rate Prediction Using a Sedimentation Tank, Craig H. Everts, OE75:June 75:294
Some Geotechnical Aspects of Marginal Wharf Design, William Enkeboll and Vernon A. Smoots, Preprint No.2699, Apr 76, 24pp.
Underwater Placement of Sand Fill at Port of Portland Terminal #6, Loren R. Anderson and John Ramage, Preprint No.2718, Apr 76, 20pp.
Volume and Strength of a Dolos, Harshkumar C. Desai, WW1:Feb 76:79:11928

Harbors
Analytical Model of Hydraulic Pipeline Dredge, David R. Basco, WW1:Feb 75:33:11097
Anchor-Last Deployment Simulation by Lumped Masses, Robert W. Thresher and John H. Nath, WW4:Nov 75:419:11709
Breakwater Back Slope Stability, James R. Walker, Robert Q. Palmer and James W. Dunham, OE75: June 75:879
Characteristics and Behavior of Pacific Coast Tidal Inlets, Joe W. Johnson, WW3:Aug 73:325:9927
The Colonial Port of Charleston, Thurman T. Morgan, Preprint No.2774, Sept 76, 26pp.
Constant Water Level Harbor: Memphis, Tennessee, Frank P. Palumbo, Jr., WW76:Aug 76:296
Development and Future of Dredging, Adolph W. Mohr, WW2:May 74:69:10513
Dynamic Effects of Ship Passage on Moored Vessels, Shen Wang, WW3:Aug 75:247:11501
Early Crises in the Port of Boston, James R. Cass, Jr., Preprint No.2774, Sept 76, 25pp.
Effects of Entrance Loss on Harbor Oscillations, Umit Unluata and Chiang C. Mei, WW2:May 75: 161:11287
Elutriation of Dredge Material in New Orleans Harbor, Charles Grimwood and Terence J. McGhee, WW76:Aug 76:476
Engineering Challenges of Dredged Material Disposal, Robert M. Meccia, William C. Allanach and Fletcher H. Griffis, WW1:Feb 75:1:11096
Evaluating Costs for Port Distribution Systems, Richard G. Waugh, Jr., WW4:Nov 75:385:11723
Experience with the Offset Surfaces Breakwater, E. Douglas Sethness, Jr., Walter L. Moore and James E. Dailey, OE75:June 75:677
Feedback from Field Studies of Hydraulic Dredges, David R. Basco, WW3:Aug 75:277:11526
Introduction to Colonial Ports, Richard L. Schultz, Preprint No.2774, Sept 76, 6pp.
New York Offshore Airport Feasibility Study, Lawrence Lerner, Preprint No.2634, Apr 76, 25pp.
Nonlinear Wave Forces on Halfcylinder and Hemisphere, Subrata K. Chakrabarti and Robert A. Naftzger, WW3:Aug 74:189:10710
Numerical Computation of Two-Dimensional Flows, John P. Grubert, WW1:Feb 76:1:11891
Optimizing the Selection of Marine Retaining Walls, Robert C. Johnston, Max Bernheimer and Dominic A. Zarrella, Preprint No.2710, Apr 76, 28pp.
Oscillations in Harbors Containing Islands, Jiin-Jen Lee, OE75:June 75:632
Parameters Affecting Stability of Rubble Mounds, Per Moller Bruun and Palmi Johannesson, WW2: May 76:141:12136
Physicochemical Properties of Dredge Spoil, Alena Mudroch and Ales J. Zeman, WW2:May 75:201: 11317
Porous Breakwater for Circulation Study of Harbors, G. Mavrigian and Simsek Sarikelle, OE75:June 75: 668
The Port of New Orleans in the 18th Century — The Formative Years, Herbert R. Haar, Jr., Preprint No.2783, Sept 76, 15pp.
The Port of Philadelphia — Past and Present, Clarence F. Wicker, Preprint No.2774, Sept 76, 20pp.
Port of San Francisco, Robert L. Sloan, Preprint No.2783, Sept 76, 26pp.
Present and Future Trends in Harbor and Port Facilities, Billy E. Smith, Preprint No.2814, Sept 76, 10pp.
Regime Equations and Tidal Inlets, Curtis Mason, WW3:Aug 73:393:9952
San Diego Harbor — Past and Present, Charles H. Fisher, Preprint No.2783, Sept 76, 4pp.
Shoaling Rate Prediction Using a Sedimentation Tank, Craig H. Everts, OE75:June 75:294
Strategic Approach to Estuarine Environmental Management, David A. Bella, WW1:Feb 75:73: 11109
Study on the Wind-Wave Characteristics in Model Harbor, G. S. Liu and Frederick L.W. Tang, OE75: June 75:706
Ultimate Fate of Suspended Material in Estuaries, Ray B. Krone, DIEE:Jan 76:180
Volume and Strength of a Dolos, Harshkumar C. Desai, WW1:Feb 76:79:11928
Wave Forces on Bottom-Mounted Large-Diameter Cylinder, C. J. Garrison, Frederick H. Gehrman and Brian T. Perkinson, WW4:Nov 75:343:11699
Wave Forces on Vertical Circular Cylinder, Subrata K. Chakrabarti, Allan L. Wolbert and William A. Tam, WW2:May 76:203:12140
Wave Induced Pressures in Permeable Seabeds, Hermann Moshagen and Alf Torum, WW1:Feb 75: 49:11099

Harbor Structures
Anchorage Port Survives Nature, Harry Ekizian, CE: Dec 76:64

Hardening
Polymer-Concrete Passes Toughest Test, Austin H. Emery and Meyer Steinberg, CE:June 76:61

Harland Bartholomew Award
1976 Harland Bartholomew Award Presented to Albert A. Dorman, CE:Oct 76:102

Hawaii
Conditional Expected Tsunami Inundation for Hawaii, Wm. Mansfield Adams, WW4:Nov 75:319:11702
Hawaii's Offshore Runway, Wayne L. Rickerd, Preprint No.2696, Apr 76, 19pp.
Marine Alternatives for Rapid Transit in Hawaii, Theodore T. Lee, WW76:Aug 76:107
State-of-the-Art of Geothermal Reservoir Engineering, Patrick K. Takahashi, Bill H. Chen, Ken I. Mashima and Arthur S. Seki, PO1:July 75:111:11455

Hazardous Materials
Development of Oregon's Hazardous Waste Program, Milan Synak, Patrick H. Wicks and Kenneth H. Spies, EE3:June 75:301:11355
Models for Evaluation of Hazardous Wastes, Albert J. Klee, EE1:Feb 76:111:11940

Hazard Perception
Bikeway Hazards, Robert H. Wortman, BP75:Dec 75:320

Hazards
Bikeway Hazards, Robert H. Wortman, BP75:Dec 75:320
Case History — Problems in Obtaining Repairs to Barber Dam, A. Kenneth Dunn, EFRLD:Sept 75:93
Engineering Risk Management of Natural and Man-Made Hazards, Larry T. Lee and Jon D. Collins, Preprint No.2757, Sept 76, 30pp.
Flood-Hazard Effects on Residential Property Values, Leonard A. Shabman and Demetrios I. Damianos, WR1:Apr 76:151:12065
Responsibility and Liability of Public and Private Interests on Dams, Jerry Phelan, EFRLD:Sept 75:63

Head Injuries
Construction Helmet Response Under Severe Impact, Werner Goldsmith, CO2:June 75:335:11349
Development of Finite Element Head Injury Model, Theodore A. Shugar and Michael G. Katona, EM3:June 75:223:11367
Structural Modeling of Human Head, Sunder H. Advani and Raymond P. Owings, EM3:June 75:257:11386

Head Losses
Explicit Equations for Pipe-Flow Problems, Prabhata K. Swamee and Akalank K. Jain, HY5:May 76:657:12146
Flows Split in Closed Loops Expending Least Energy, Madan L. Arora, TN: HY3:Mar 76:455:11954

Head Protection
Construction Helmet Response Under Severe Impact, Werner Goldsmith, CO2:June 75:335:11349

Health
Bike and Pedestrian Pathways, CE:Nov 75:72
Environmental Health Impact Assessment, Samuel C. Morris and E. W. Novak, EE3:June 76:549:12192
The Role of the Bicycle, James J. Berryhill, BP75:Dec 75:33
Working with the Health Client, James Falick, EFAN:Dec 74:116

Health Hazards
Disease Risks of Occupational Exposure to Sewage, C. Scott Clark, Edward J. Cleary, Gilbert M. Schiff, Clavin C. Linneman, Jr., John P. Phair and Terrence M. Briggs, EE2:Apr 76:375:12038
Health Considerations in Use of Tertiary Effluents, Robert C. Cooper, Preprint No.2723, Apr 76, 18pp.

Health Regulations
Environmental Health Impact Assessment, Samuel C. Morris and E. W. Novak, EE3:June 76:549:12192

Health Standards
Summary for Session III—Health Delivery Systems, Jack L. Mahan, Jr., EFAN:Dec 74:252
Working with the Health Client, James Falick, EFAN:Dec 74:116

Heat Conductivity
Experiments for Accuracy and Stability of Heat Conduction, Rao Yalamanchili, NMG:June 76:I-93
Thermal Calculations for Bridge Design, Bruce W. Hunt and Nigel Cooke, ST9:Sept 75:1763:11545

Heated Water
Turbulent Jets with Reversible Buoyancy, Subhash C. Jain and Jose M. Pena, HY9:Sept 75:1221:11586

Heating
Experiments for Accuracy and Stability of Heat Conduction, Rao Yalamanchili, NMG:June 76:I-93

Heat Transfer
The Dissipation of Excess Heat from Water Systems, Harvey E. Jobson, PO1:May 73:089:9702
Heat Transfer in Soil-Water-Ice Systems, Aditya Mohan, GT2:Feb 75:97:11123
Hydraulic Fracture and Heat Extraction from Hot Dry Rock Masses: A Finite Element Approach, S. Nemat-Nasser, Zdenek P. Bazant and H. Ohtsubo, NMG:June 76:I-79
Numerical Prediction of Thermal-Regime of Rivers, Poothrikka P. Paily and Enzo O. Macagno, HY3:Mar 76:255:11997
Regional Impacts from Water Consumption and Heat Disposal in River Basins and Estuaries, Edwin T. Engman, EFEEC:Aug 75:131
Role of Eddy Diffusivity in Thermocline Formation, Brian Henderson-Sellers, EE3:June 76:517:12174
Soil Moisture Movement by Temperature Gradient, Arved J. Raudkivi and Nguyen Van U'u, GT12:Dec 76:1225:12645

Heat Treatment
Collapsible Soils, John P. Bara, Preprint No.2797, Sept 76, 12pp.

Heaving
A Case History of Expansive Claystone Damage, Richard L. Meehan, Michael T. Dukes and Patrick O. Shires, GT9:Sept 75:933:11590
Review of Expansive Soils, Gerald J. Gromko, GT6:June 74:667:10609

Heavy Metal Excretion
A Study to Predict the Release of Metals from Hydraulically Dredged Material, William R. Gee, Robert W. George, John P. Hewitt and Kenneth B. Kim, WW76:Aug 76:492

Heavy Metals
Distribution of Toxic Heavy Metals in Marine and Freshwater Sediments, J. M. Brannon, R. M. Engler, J. R. Rose, P. G. Hunt and I. Smith, DIEE:Jan 76:455
Investigation of the Elutriate Test, Thomas P. O'Connor, DIEE:Jan 76:299
Physicochemical Parameters that Regulate Mobilization and Immobilization of Toxic Heavy Metals, Robert P. Gambrell, Rashid A. Khalid and W. H. Patrick, Jr., DIEE:Jan 76:418
A Promising New Process for Removing Heavy Metals from Wastewater, CE:Oct 76:78
Removal of Heavy Metals from Industrial Effluents, Jim V. Rouse, EE5:Oct 76:929:12447
Sediment and Elutriate Toxicity to Oyster Larvae, Rick D. Cardwell, Charles E. Woelke, Mark I. Carr and Eugene W. Sanborn, DIEE:Jan 76:684

Soil-Plant Relationships in Dredged Material Marshes with Particular Reference to Heavy Metal and Nutrient Availability, J. S. Boyce, DIEE:Jan 76:496
A Study to Predict the Release of Metals from Hydraulically Dredged Material, William R. Gee, Robert W. George, John P. Hewitt and Kenneth B. Kim, WW76:Aug 76:492

Heavy Water Reactors
Aerodynamic Investigations of In-Line Slender Towers for Heavy Water Plants, K. R. Cooper, H. P.A.H. Irwin and R. L. Wardlaw, ST76:Aug 76:286

Hele-Shaw Model
Study of Fluid Movements through Causeway, Ralph Ta-Shun Cheng and Min-Hsiung Hu, HY1: Jan 75:155:11076

Helicopter Hoists
Largest and Lightest Fabric Roof to Date, David H. Geiger, CE:Nov 75:82

Helicopters
Helicopter-Erected Tower Crane Demolishes Buildings, Charles R. Schrader, CE:May 75:60

Helixes
Helicoidal Girders, Himat T. Solanki, TN: ST4:Apr 76:869:12076

Helmets
Construction Helmet Response Under Severe Impact, Werner Goldsmith, CO2:June 75:335:11349

Hemispheres
Nonlinear Wave Forces on Halfcylinder and Hemisphere, Subrata K. Chakrabarti and Robert A. Naftzger, WW3:Aug 74:189:10710

Herbicides
Environmental Aspects of Aquatic Plant Control, Thomas R. Bartley and Edward O. Gangstad, IR3: Sept 74:231:10810

Heuristic Methods
A Heuristic Game for Material Selection in Structural Design Using the Hybrid Computer, Rick R. Evans, Subhash C. Anand and Myron Spector, Preprint No.2737, Sept 76, 25pp.
Optimal Substructuring Schemes, Michael O'Rourke and Thomas Bizal, ST76:Aug 76:1037

High Head
Fluid-Dynamic Excitation Involving Flow Instability, Wallace W. Martin, Eduard Naudascher and Mahadevan Padmanabhan, HY6:June 75:681:11361

High Lift Devices
Lower Granite Lock — Prototype Performance, George C. Richardson, WW76:Aug 76:1442

High Strength Concretes
Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, WW4:Nov 76:455: 12561
Concrete Structures for Subsea Oil Recovery — Design Considerations, Everald V. Wright and Marcel Gerbault, Preprint No.2675, Apr 76, 21pp.
Concrete Technology Aspects of CN Tower, John A. Bickley, CO1:Mar 75:201:11192
Fifty-Year Developments in High Strength Concrete, Colin D. Johnston, CO4:Dec 75:801:11757
9000 psi Concrete — Why? Why not?, William Schmidt and Edward S. Hoffman, CE:May 75:52

High Strength Steels
Past 50-Year Development of Constructional Steels, Ralph D. Webb, John A. Gilligan and Roland M. Brown, CO4:Dec 75:785:11753

High Temperature
Computer Analysis of Steel Frame in Fire, Wun-Chau Cheng and Cary K. Mak, ST4:Apr 75:854: 11262
High-Temperature Drying of Thick Concrete Slabs, Harshavordhan C. Mehta, Wai F. Chen, John A. Manson and John W. Vanderhoff, TE2:May 76: 185:12102

High Velocity
Cavitation from Surface Irregularities in High Velocity, James W. Ball, HY9:Sept 76:1283:12435
Control of High Velocity Flow Into a Tidal Basin, Alex Sheydayi, WW76:Aug 76:999

Highway Construction
Evaluation of the Maryland Bikeway Program, Paul R. Farragut, BP75:Dec 75:443
Interstate Highway System, Kneeland A. Godfrey, Jr., CE:Mar 75:51
Interstate Squeezes through River Gorge, CE:June 75:54
Sediment Control during Highway Construction in Central Pennsylvania, Lloyd A. Reed, IR76:July 76: 497
Sediment Runoff During Highway Construction, William G. Weber, Jr. and Lloyd A. Reed, CE:Mar 76:76
Slipform Pavers Prove Their Versatility, Gordon K. Ray, Edwin C. Lokken and Robert G. Packard, TE4:Nov 75:721:11725
States Intensifying Efforts to Reduce Highway Landslides, Ronald G. Chassie and Roger D. Goughnor, CE:Apr 76:65
Whither Goest the Bikeway Boom?, Charles F. Floyd, BP75:Dec 75:471
8-Story Building Moved to Avoid Wrecker's Ball, Antonio Paez Restropo, CE:June 75:62

Highway Costs
States Intensifying Efforts to Reduce Highway Landslides, Ronald G. Chassie and Roger D. Goughnor, CE:Apr 76:65

Highway Departments
Yukon River to Prudhoe Bay Highway — Lessons in Arctic Design and Construction, James F. McPhail, William B. McMullen and Allan W. Murfitt, CE: Feb 76:78

Highway Design
Access Control on Arterial Highways, John C. Glennon and Jamil A. Azzeh, TE1:Feb 76:75:11912
Class I Bikeway Geometrics, Thomas H. Crawford, BP75:Dec 75:308
Evaluation of the Maryland Bikeway Program, Paul R. Farragut, BP75:Dec 75:443
Interstate Highway System, Kneeland A. Godfrey, Jr., CE:Mar 75:51
Interstate Squeezes through River Gorge, CE:June 75:54
Legal Liability and Highway Design and Maintenance, David C. Oliver, TE3:Aug 75:425: 11481

Highway Drainage
Filter Fabrics: Growing Use in Road and Highway Construction, Eugene E. Dallaire, CE:May 76:61
Sediment Runoff During Highway Construction, William G. Weber, Jr. and Lloyd A. Reed, CE:Mar 76:76

Highway Engineering
Acquiring Traffic Data by In-Motion Weighing, R. B. Machemehl, Clyde E. Lee and C. Michael Walton, TE4:Nov 75:681:11716
Application of Stability Analyses to Slope Design, Umakant Dash, NMG:June 76:II-725
Bus/Carpool FWY Lanes in the San Francisco Area, Leonard Newman, Preprint No.2646, Apr 76, 26pp.
Cable-Stayed Versus Classical Suspension Bridge, Walter Podolny, Jr., TE2:May 76:291:12130

Cumulative Deflection and Pavement Performance, William H. Highter and Milton E. Harr, TE3:Aug 75:537:11507
Enclosed Soak System for Deep Polymer Impregnation of Concrete Bridge Decks, Paul R. Blankenhorn, Richard E. Weyers, Donald E. Kline and Philip D. Cady, TE1:Feb 75:65:11102
Experimental Bridge Girder of Reinforced Plastic, Fred C. McCormick, TE1:Feb 75:47:11104
Experimental Work for Active Clays in Mississippi, T. C. Paul Teng and M. Barrett Clisby, TE1:Feb 75:77:11105
Finite Element Analysis of Pile-Supported Pavement Structures, Raman Pichumani, John E. Crawford and George E. Triandafilidis, TE2:May 74:293:10516
Fracture of Pavement Materials, Geoffrey E. Blight, TE4:Nov 73:801:10139
Future of Highways, Fiscal Constraints, Srikanth Rao, Thomas D. Larson and Theodore H. Poister, Preprint No.2768, Sept 76, 24pp.
High-Accident Spot-Improvement Program, Kenneth R. Agent, John A. Deacon and Robert C. Deen, TE2:May 76:427:12123
High-Temperature Drying of Thick Concrete Slabs, Harshavordhan C. Mehta, Wai F. Chen, John A. Manson and John W. Vanderhoff, TE2:May 76:185:12102
Improved Design of Highway Culvert, Jerome M Normann, CE:Mar 75:70
The Interstate Era of Highway Construction, Wesley S. Mendenhall, Jr., Preprint No.2793, Sept 76, 21pp.
I-70 Glenwood Canyon — Design Concept, Joseph H. Looper, TE2:May 76:201:12138
Legal Liability and Highway Design and Maintenance, David C. Oliver, TE3:Aug 75:425:11481
Los Angeles Tackles Freeway Congestion, Kneeland A. Godfrey, Jr., CE:Sept 75:96
Modeling Social Impacts of Urban Highways, David C. Colony and Abul B. Shah Alam, TE2:May 76:395:12148
Need for Estimated Cement Requirements for Stabilizing Lateritic Soils, Samuel A. Ola, TE2:May 74:379:10534
New and Conventional Engineering Uses of Fly Ash, Ramesh C. Joshi, Donald M. Duncan and Howard M. McMaster, TE4:Nov 75:791:11730
Off-Highway Transportation in the Arctic, Arthur D. Anderson, CE:Mar 76:72
Optimizing Economic Return on Highway Investment, Robert L. Carstens, TE4:Nov 76:665:12529
Pavement Applications for Steel Fibrous Concrete, David R. Lankard and Alvin J. Walker, TE1:Feb 75:137:11108
Polymer-Impregnated Concrete: Field Studies, Harshavardhan C. Mehta, John A. Manson, Wai F. Chen and John W. Vanderhoff, TE1:Feb 75:1:11103
Processing Variable Forms for Travel Estimation, Jason C. Yu and Robert J. Popper, TE1:Feb 76:91:11938
Regional Transport Development and Economic Growth, Kenneth A. Brewer and Robert O. Richards, Jr., TE2:May 76:271:12126
Roadside Slope Design for Safety, Eugene L. Marquis and Graeme D. Weaver, TE1:Feb 76:61:11922
Slipform Pavers Prove Their Versatility, Gordon K. Ray, Edwin C. Lokken and Robert G. Packard, TE4:Nov 75:721:11725
Sulfur-Asphalt Mixtures Using Poorly Graded Sands, Don Saylak, Bob M. Gallaway, Jon A. Epps and Haffizudin Ahmid, TE1:Feb 75:97:11106
Surface Texture of British Concrete Pavements, William E. Murphy and David P. Maynard, TE1:Feb 75:115:11107
Traffic Volume Counting Recorders, Edward L. Priestas and Thomas E. Mulinazzi, TE2:May 75:211:11306
Transportation, Land Use, and Air Quality Programs, Charles E. Dare, TE2:May 76:411:12124

Highway Environmental Impact

Urban Freeways and Changing Social Values, Kneeland A. Godfrey, Jr., CE:May 75:80
Use of Space in Highway Impact Zone, Floyd I. Thiel, Roger D. Mingo and Jo Ann Fields, TE4:Nov 76:727:12539

Highway Maintenance

Practical Proposal for Restoring Manhattan's West Side Highway, Robert Moses, CE:Nov 75:49
States Intensifying Efforts to Reduce Highway Landslides, Ronald G. Chassie and Roger D. Goughnor, CE:Apr 76:65

Highway Planning

Citizen Participation: Assessing Public Attitudes, Desmond M. Connor, CE:Oct 75:78
Community Acceptance of Highway Corridor Development, Douglas Nunn, EI3:July 75:337:11414
Evaluation of the Maryland Bikeway Program, Paul R. Farragut, BP75:Dec 75:443
Highway and Sewer Impacts on Urban Development, Frank T. Rabe and James F. Hudson, UP2:Nov 75:217:11728
Maintenance Management Aids, Eugene L. Marvin, Preprint No.2637, Apr 76, 25pp.
Planning and Development of Bicycle Facilities: Implementation Planning, Walter H. Kraft and Carl M. Berkowitz, BP75:Dec 75:36

Highway Relocation

Citizen Participation: Assessing Public Attitudes, Desmond M. Connor, CE:Oct 75:78

Highways

Acquiring Traffic Data by In-Motion Weighing, R. B. Machemehl, Clyde E. Lee and C. Michael Walton, TE4:Nov 75:681:11716
American Road Building - Fifty Years of Progress, Herbert W. Busching and Randolph Russell, CO3:Sept 75:565:11577
Analytical Study of Freeway Reliability, Abishai Polus and Joseph L. Shofer, TE4:Nov 76:857:12570
Concrete Pipe Culvert Behavior - Part 2, Raymond Eugene Davis and Alfred E. Bacher, ST3:Mar 74:615:10408
Concrete Pipe Culvert Behavior—Part 1, Raymond Eugene Davis, Alfred E. Bacher and John C. Obermuller, ST3:Mar 74:599:10404
Cost Effectiveness Maintenance-Management Systems, Gary N. Shofner, TE2:May 76:331:12133
Highway and Sewer Impacts on Urban Development, Frank T. Rabe and James F. Hudson, UP2:Nov 75:217:11728
Incorporating Highway Safety into Level of Service, Walter J. Diewald, TE2:May 74:417:10557
Landmarks Attest CE Contribution to Progress, CE:Aug 76:76
Load Factor Analysis of Design of Bridges, James C. Porter, ST5:May 76:891:12098
Measured Versus Predicted Air Quality Near Highways, Terry L. Miller and Kenneth E. Noll, EE3:June 76:627:12195
New Safety and Service Guides for Sight Distance, Ronald C. Pfefer, TE4:Nov 76:683:12517
Performance of Pennsylvania Highway Drainage Inlets, Arthur W. Brune, Walter H. Graf, Erik Appel and Peter P. Yee, HY12:Dec 75:1519:11801
Planning Criteria for Bikeways, Vincent R. Desimone, TE3:Aug 73:609:9928
Significance of Variably Confined Triaxial Testing, John J. Allen and Marshall R. Thompson, TE4:Nov 74:827:10911
Social and Environmental Costs in Construction, Enno Koehn, CO4:Dec 76:593:12599
Transportation Energy Considerations, Alexander French, TE1:Feb 76:27:11919
Use of Space in Highway Impact Zone, Floyd I. Thiel, Roger D. Mingo and Jo Ann Fields, TE4:Nov 76:727:12539
Visual Quality Controls in Highway Design, Bob L. Smith, TE3:Aug 75:479:11487

Winners of 1975 Highway Environment Awards; Competition Open for '76, CE:June 76:12

Highway Safety
Los Angeles Tackles Freeway Congestion, Kneeland A. Godfrey, Jr., CE:Sept 75:96
Nighttime Visibility Through Retro-Reflective Materials, Robert A. Isaksen, BP75:Dec 75:426

Highway Transportation
Concrete Applications in Transportation Construction (1891-1976), Gordon K. Ray, Preprint No.2745, Sept 76, 29pp.
Diamonds Are The Way To Go, Vincent D. Paul and Robert G.B. Goodell, Preprint No.2681, Apr 76, 12pp.
Evaluating Multi-Modal Alternatives: San Diego/Los Angeles Corridor Study, Darwin G. Stuart, Preprint No.2666, Apr 76, 29pp.
The Future of Highways From the Mass Transit Viewpoint, E. L. Tennyson, Preprint No.2751, Sept 76, 17pp.
Visual Quality Controls in Highway Design, Bob L. Smith, TE3:Aug 75:479:11487
The Wrong Way is Sometimes the Right Way, Marshall Suloway, Preprint No.2697, Apr 76, 18pp.

Hinges
Rigid Plastic Beam Model for Pipe Whip Analysis, Martin A. Salmon and Vijay K. Verma, EM3:June 76:415:12206

Historic Sites
Historic Preservation and the Role of the Civil Engineer, Ernest Allen Connally, Preprint No.2744, Sept 76, 11pp.

History
American Road Building - Fifty Years of Progress, Herbert W. Busching and Randolph Russell, CO3: Sept 75:565:11577
American Wooden Bridges, Neal FitzSimons, Chmn., AWB:76, 176pp.
America's Greatest Suspension Bridges, CE:July 76: 78
Art in Engineering - The Need for a New Criticism, David P. Billington, PP4:Oct 73:499:10102
Benjamin Latrobe: Helping Cleanse America, CE:July 76:80
Benjamin Wright: Father of American Civil Engineering, CE:Apr 76:9
The Bicentennial of Structural Engineering, Carl Hirsch, ST76:Aug 76:359
Birth of the Skyscraper, CE:July 76:61
Brick Masonry Shells, Clayford T. Grimm, ST1:Jan 75:79:11050
A Brief History of the Steel Joist Industry, Robert C. Macomber, Preprint No.2758, Sept 76, 12pp.
The Brock and Weymouth Photogrammetric Mapping Equipment, Alfred O. Quinn, Preprint No.2789, Sept 76, 10pp.
Canal Development in Early America, Richard G. Waugh, Jr., Preprint No.2774, Sept 76, 30pp.
Case Study of Burr Truss Covered Bridge, Emory L. Kemp and John Hall, EI3:July 75:391:11461
Civil Engineering History Gives Valuable Lessons, Sara Ruth Watson, CE:May 75:48
The Colonial Port of Charleston, Thurman T. Morgan, Preprint No.2774, Sept 76, 26pp.
Concrete Applications in Transportation Construction (1891-1976), Gordon K. Ray, Preprint No.2745, Sept 76, 29pp.
Conowingo-Peach Bottom Energy Complex: Financial, Legal and Public Relations Aspects, W. H. Johnson, EFEEC:Aug 75:292
A Decade of Research in Surveying and Mapping, Morris M. Thompson, SU1:Oct 75:1:11626
Decisions About Wastewater Technology, 1800-1932, Joel A. Tarr and Francis Clay McMichael, Preprint No.2792, Sept 76, 30pp.
Development of the Water Resources in the Tennessee Valley Region, Bevan W. Brown, Jr., Preprint No.2799, Sept 76, 22pp.
Developments in Trench-Type Tunnel Construction, Wayne F. Palmer and Kenneth C. Roberts, CO1: Mar 75:37:11183
Durability of Concrete Construction—50 Years of Progress, Bryant Mather, CO1:Mar 75:5:11165
Early American Riverports, Robert H. Allan, Preprint No.2783, Sept 76, 26pp.
Early Crises in the Port of Boston, James R. Cass, Jr., Preprint No.2774, Sept 76, 25pp.
Early Developments in American Concrete, Russell S. Fling, Preprint No.2791, Sept 76, 24pp.
Elements of Steel Structures — History, State-of-the-Art, and Potential Developments: Columns, Reidar Bjorhovde, Preprint No.2786, Sept 76, 24pp.
Empire State: Greatest of All Skyscrapers, CE:July 76:65
The Evolution of Urban Transportation, CE:July 76: 75
Fifty-Year Development — Construction of Steel Truss Bridges, Lawrence N. Bigelow, CO2:June 75: 239:11381
Fifty-Year Development: Construction of Steel Arch Bridges, William F. Hollingsworth, CO1:Mar 75:85: 11187
Fifty-Year Development: Construction of Steel Suspension Bridges, James D. Dwyer, CO1:Mar 75: 105:11176
Fifty-Year Development: Construction of Steel Hybrid Bridges, Ralph F. Trepal, CO4:Dec 75:719: 11765
Fifty-Year Developments in High Strength Concrete, Colin D. Johnston, CO4:Dec 75:801:11757
Fifty-Year History of Movable Bridge Construction - Part I, Egbert R. Hardesty, Henry W. Fischer and Richard W. Christie, CO3:Sept 75:511:11565
Fifty-Year History of Movable Bridge Construction-Part II, Egbert R. Hardesty, Henry W. Fischer and Richard W. Christie, CO3:Sept 75:529:11594
Fifty-Year History of Movable Bridge Construction—Part III, Reece H. Wengenroth, Howard A. Mix and Egbert R. Hardesty, CO3:Sept 75:545:11555
Fifty Years of Aluminum in Construction, Cedric Marsh, CO3:Sept 75:583:11591
Finite Element Structural Analysis, An Overview, Richard H. Gallagher, Preprint No.2765, Sept 76, 28pp.
The Forgotten Engineer: John Stevens and the Panama Canal, Virginia Fairweather, CE:Feb 75:54
George E. Waring: Man of Many Talents, CE:Apr 76:14
George Waring: Giving Sanitation Status, CE:July 76: 81
Giuseppe Venturoli, Pioneer in Channel Studies, Rene Chevray, HY10:Oct 76:1533:12488
Half a Century of Soil Mechanics—Some Thoughts for the Future in the Light of the Past, Gregory P. Tschebotarioff, EI3:July 76:321:12251
Half a Century Progress in Soft Ground Tunneling, George A. Fox and Louis E. Nicolau, CO4:Dec 76: 637:12622
A Half-Century of Cold-Regions Construction, F. Lawrence Bennett, CO4:Dec 75:839:11780
Half Century of USBR Arch Dam Construction, James R. Graham, James Legas and Ernest A. Lindholm, CO2:June 75:281:11387
Handling Concrete--Then and Now, Joseph J. Waddell, CO4:Dec 75:819:11779
Historical Review of Earthquakes, Damage, and Building Codes, Glen V. Berg, ST76:Aug 76:387
Historic Preservation and the Role of the Civil Engineer, Ernest Allen Connally, Preprint No.2744, Sept 76, 11pp.
History of ASCE and Civil Engineering, CE:Apr 75: 67
A History of Bureau of Reclamation Construction-Part I, Harold G. Arthur, CO1:Mar 75:51:11189
A History of Bureau of Reclamation Construction-Part II, Harold G. Arthur, CO1:Mar 75:69:11190
The History of Computers — A Vendor's View, Vincent J. Vitagliano, Preprint No.2759, Sept 76, 22pp.
History of Geodetic Networks, James R. Plasker, SU1:Dec 76:21:12612

History of Indexing and Abstracting by the American Society of Civil Engineers, Irving Amron, Preprint No.2736, Sept 76, 25pp.
A History of Joints in Concrete Pavements, John P. Cook, CO1:Mar 75:29:11201
History of Steel Beam Design, Theodore V. Galambos, Preprint No.2776, Sept 76, 21pp.
History of the Theory of Bridge Structures, Bogdan O. Kuzmanovic, Preprint No.2738, Sept 76, 32pp.
Hydraulic Dredges, Including Boosters, Gail G. Gren, DIEE:Jan 76:115
Hydrology and Water Resources Planning in America: 1776 to 1976, Ray K. Linsley, Preprint No.2754, Sept 76, 12pp.
Integrating Environmental Factors Into Water Planning: An Historical Perspective, Leonard Ortolano, Preprint No.2754, Sept 76, 20pp.
The Interstate Era of Highway Construction, Wesley S. Mendenhall, Jr., Preprint No.2793, Sept 76, 21pp.
Introduction to Colonial Ports, Richard L. Schultz, Preprint No.2774, Sept 76, 6pp.
An Introduction to Fifty Years of Tunneling, Robert S. Mayo, CO2:June 75:259:11348
James B. Eads: A Great River Man, CE:Apr 76:9
John R. Freeman and His Influence on Hydraulics, John B. Drisko, Preprint No.2767, Sept 76, 10pp.
Keynote Adress - Man as the Measure, Nathaniel A. Owings and Cabell Gwathmey, EFAN:Dec 74:5
Landmarks Attest CE Contribution to Progress, CE: Aug 76:76
Landmarks in Reinforced Concrete, John A. Diehl, CE:Nov 75:87
Land Surveying Research: 1965-1975, John A. Dearinger, SU1:Oct 75:51:11649
Latticed Structures: State-of-the-Art Report, Donald R. Sherman, Chmn., ST11:Nov 76:2197:12581
Learn From Biographies of Early Engineers, Philip L. Alger, CE:Mar 75:90
Menabrea's Note on Waterhammer: 1858, Alexander Anderson, HY1:Jan 76:29:11831
O.H. Ammann: A View from the Bridge, CE:July 76: 77
Past 50-Year Development of Constructional Steels, Ralph D. Webb, John A. Gilligan and Roland M. Brown, CO4:Dec 75:785:11753
Planning for Water Quality: 1776 to 1976, Donald L. Hey and W. Henry Waggy, Preprint No.2754, Sept 76, 16pp.
The Port of New Orleans in the 18th Century — The Formative Years, Herbert R. Haar, Jr., Preprint No.2783, Sept 76, 15pp.
Port of San Francisco, Robert L. Sloan, Preprint No.2783, Sept 76, 26pp.
Present and Future Trends in Foundations, Robert E. White, Preprint No.2795, Sept 76, 17pp.
Prestressed Concrete Bridges, Brice F. Bender, Preprint No.2742, Sept 76, 20pp.
The Professional Engineer Half a Century Hence, Alfred C. Ingersoll, CE:Mar 75:74
Reclamation and Western Development, Donald J. Duck, WW76:Aug 76:1114
Reinforced Concrete Materials — A Remarkable Heritage, Clyde E. Kesler, Preprint No.2755, Sept 76, 21pp.
San Diego Harbor — Past and Present, Charles H. Fisher, Preprint No.2783, Sept 76, 4pp.
Some Historic Bridges of the United States, Sara Ruth Watson, EI3:July 75:383:11425
The Story of America's Transportation Revolution, Eugene E. Dallaire, CE:July 76:70
The Three Ages of Philadelphia, Kneeland A. Godfrey, Jr., CE:July 76:44
The Turn From Masonry: A Study of Arch Bridges in Reinforced Concrete, David P. Billington, Preprint No.2819, Sept 76, 30pp.
Two Centuries of Water Planning: A Review of the Development of Methodology, Ray K. Linsley, Preprint No.2754, Sept 76, 10pp.
Two Hundred Years—and More—of Engineering in the United States, Charles A. Parthum, EI4:Oct 76: 423:12506
Water for the Valley of the Sun, William W. Reedy, Preprint No.2782, Sept 76, 27pp.
Water Planning — An Overview, Eugene W. Weber, Preprint No.2754, Sept 76, 8pp.
Water Resources Planning — Historical Development, Theodore M. Schad, Preprint No.2754, Sept 76, 22pp.
Water Resources Planning in America: 1776 to 1976 — Impact of Other Policies on Water Planning: Public Health, Leonard B. Dworsky and Bernard B. Berger, Preprint No.2754, Sept 76, 16pp.

Holographic Interferometry

Some Effects of Dynamic Soil Properties on Soil-Structure Interaction, Frank E. Richart, Jr., GT12: Dec 75:1193:11764

Homogeneity

Elastic-Plastic Torsion of Nonhomogeneous Bars, Carl T. Herakovich and Rafik Y. Itani, EM5:Oct 76:757:12446

Honduras

Tentative Program for the Solution of the Sula Valley Flood Problem, Ricardo Alduvin A., WW76:Aug 76:892

Hospitals

Conference Review and Evaluation, David G. Ellingson, EFAN:Dec 74:287
The Constructed Environment with Man as the Measure as Part of the Quality System in Construction, Cabell Gwathmey, Chmn., EFAN: Nov 74
Evaluating the Quality of Constructed Environments, Rudolf H. Moos and Bernice S. Moos, EFAN:Dec 74:143
Modeling of Health Care Delivery, Jeng Wen Hwang and Milton E. Harr, UP1:Aug 76:157:12345
A New Generation of Military Hospitals, Vernon McKenzie and Roy D. Lemons, EFAN:Dec 74:108
Reporter's Summary for Session VI—Summary Session, Cabell Gwathmey, EFAN:Dec 74:292
Some Insights into the Behavioral Evaluation of Hospitals; Results of Three Studies, Wayne D. Veneklasen, Kevin E. Coray and Sue D. Pendell, EFAN:Dec 74:127
Staff Versus Administration Versus Board or the Planning Process Organized for Consensus Instead of Conflict, James Falick, David Burdick and Henry Winkelman, Preprint No.2701, Apr 76, 23pp.
Summary for Session III—Health Delivery Systems, Jack L. Mahan, Jr., EFAN:Dec 74:252

Hot Film Anemometers

Wall Shear Measurment in Sand-Water Mixture Flows, Oner Yucel and Walter H. Graf, HY7:July 75:947:11453

Housing

Building Construction Management Game, Kenneth F. Reinschmidt, James W. Litchfield and Steven D. Hunt, EI2:Apr 75:117:11248
Changes in Socioeconomic Considerations, Walter E. Lewis, UP1:Aug 76:29:12355
Distributing Public Housing Resources, Bruce Yandle and George Biediger, UP2:Nov 75:147:11689
Effect of Building Regulations on Built Environment, Daniel L. Schodek, EI3:July 76:293:12261
Energy Conservation in Housing Construction, John A. Lepore, Noam Lior and Sidney Shore, Preprint No.2781, Sept 76, 30pp.
Interaction Relationship of Community Development with Government Programs, John J. Wilder, EI4: Oct 76:471:12502
Kingwood: A Non-Assisted Private Suburban Development, Daniel B. Stauffer, Preprint No.2656, Apr 76, 26pp.
New York City's New Town, David I. Ozerkis, CE: Nov 75:68
San Antonio Ranch Case Study— National Environmental Policy Act, Robert G. Honts, UP2: Nov 75:127:11683

Human Behavior
Architects and Nature: On the Primacy of Man, Eric Hoffer, EFAN:Dec 74:8
A Communications Project — D/FW Airport, Jack D. Downey, EFAN:Dec 74:168
Conference Review and Evaluation, David G. Ellingson, EFAN:Dec 74:287
The Constructed Environment with Man as the Measure as Part of the Quality System in Construction, Cabell Gwathmey, Chmn., EFAN: Nov 74
Design of the D/FW Airport Terminals for the Public, Tom Bear, EFAN:Dec 74:197
Evaluating the Constructed Environment; A Comparison of Two Biomedical Research Laboratories, Robert Gutman and Barbara Westergaard, EFAN:Dec 74:14
Human Factors in the Constructed Environment, H. McIlvaine Parsons, EFAN:Dec 74:93
New Building Measures Needed in Order to Design for People, Calvin W. Taylor, EFAN:Dec 74:47
Nicollet Avenue Case Study, Rodney E. Engelen, EFAN12:Dec 74:231
Nicollet Avenue Case Study, Rodney E. Engelen, Preprint No.2672, Apr 76, 14pp.
Reporter's Summary for Session VI—Summary Session, Cabell Gwathmey, EFAN:Dec 74:292
Reporter's Summary of Discussions for Session V — Center City Malls, Jack L. Mahan, Jr., EFAN:Dec 74:278
Some Insights into the Behavioral Evaluation of Hospitals; Results of Three Studies, Wayne D. Veneklasen, Kevin E. Coray and Sue D. Pendell, EFAN:Dec 74:127
Summary for Session II - Human Factors Affecting the Constructed Environment, Kevin E. Coray and Ronald W. Petersen, EFAN:Dec 74:249
Summary for Session III—Health Delivery Systems, Jack L. Mahan, Jr., EFAN:Dec 74:252
Summary for Session IV —Case Study of Dallas/Fort Worth Airport, Jack L. Mahan, Jr., EFAN:Dec 74: 265
Summary for Session V—Case Study of a Central City Mall, Rodney E. Engelen, EFAN:Dec 74:275
Working with the Health Client, James Falick, EFAN:Dec 74:116

Human Body Impact Tolerances
Structural Modeling of Human Head, Sunder H. Advani and Raymond P. Owings, EM3:June 75: 257:11386

Human Factors
Adapting Flood Control Projects for Environmental Compatibility, John M. Tettemer and Harold A. Vance, IR76:July 76:315
Bicycle Facility Design Considerations: A Summary, John E. Baerwald, BP75:Dec 75:259
A Communications Project — D/FW Airport, Jack D. Downey, EFAN:Dec 74:168
Conference Review and Evaluation, David G. Ellingson, EFAN:Dec 74:287
The Constructed Environment with Man as the Measure as Part of the Quality System in Construction, Cabell Gwathmey, Chmn., EFAN: Nov 74
Dams in Relation to Balanced Public Safety, Bob Buehler, EFRLD:Sept 75:27
Design of the D/FW Airport Terminals for the Public, Tom Bear, EFAN:Dec 74:197
Effects of Man on Low Flows, Henry C. Riggs, IR76: July 76:306
Evaluating the Quality of Constructed Environments, Rudolf H. Moos and Bernice S. Moos, EFAN:Dec 74:143
Floating Plate under Wind Waves and Human Response, Masanobu Shinozuka, H. M. Hwang and E. Makitani, Preprint No.2650, Apr 76, 30pp.
Human Factors in the Constructed Environment, H. McIlvaine Parsons, EFAN:Dec 74:93
The Human Potential Movement, Laurence Loeb, CE:Jan 76:66
Impact of Air Quality on Bicyclists, Eugene E. Burr and Terry L. Miller, BP75:Dec 75:571
Is There Anything to 'Encounter Groups'?, Kneeland A. Godfrey, Jr., CE:Jan 76:67
Keynote Adress - Man as the Measure, Nathaniel A. Owings and Cabell Gwathmey, EFAN:Dec 74:5
A New Generation of Military Hospitals, Vernon McKenzie and Roy D. Lemons, EFAN:Dec 74:108
New Safety and Service Guides for Sight Distance, Ronald C. Pfefer, TE4:Nov 76:683:12517
Nicollet Avenue Case Study, Rodney E. Engelen, EFAN12:Dec 74:231
Nicollet Avenue Case Study, Rodney E. Engelen, Preprint No.2672, Apr 76, 14pp.
Pedestrian Behavior: A Study of the Organization of Co-Active Behavior, Ronald Goodrich, BP75:Dec 75:374
Reporter's Summary for Session VI—Summary Session, Cabell Gwathmey, EFAN:Dec 74:292
Reporter's Summary of Discussions for Session V — Center City Malls, Jack L. Mahan, Jr., EFAN:Dec 74:278
Resolving Conflicts Between People and Cars, Herbert S. Levinson, BP75:Dec 75:97
The Role of the Bicycle, James J. Berryhill, BP75: Dec 75:33
Simulation of N-Degree Stochastic Wind Force Vector for the Three-Dimensional Dynamic Analysis of Tall Buildings, P. Jayachandran and William E. Saul, ST76:Aug 76:269
Summary for Session II - Human Factors Affecting the Constructed Environment, Kevin E. Coray and Ronald W. Petersen, EFAN:Dec 74:249
Summary for Session III—Health Delivery Systems, Jack L. Mahan, Jr., EFAN:Dec 74:252
Summary for Session IV —Case Study of Dallas/Fort Worth Airport, Jack L. Mahan, Jr., EFAN:Dec 74: 265
Summary for Session V—Case Study of a Central City Mall, Rodney E. Engelen, EFAN:Dec 74:275
Summary for the Keynote Session I - The Quality System in Construction, Wayne D. Veneklasen, EFAN:Dec 74:246
Working with the Health Client, James Falick, EFAN:Dec 74:116

Human Resources
Environmental Values and Water Quality Planning, Peter Richerson and Robert Johnston, HY2:Feb 75: 259:11136

Hurricanes
Mean Speed Profiles of Hurricane Winds, Emil Simiu, V. C. Patel and John F. Nash, EM2:Apr 76: 265:12044
Model of Hurricane Tide in Cape Fear Estuary, James E. Overland and Vance A. Myers, WW4: Nov 76:407:12549
Predicting Wind-Induced Response in Hurricane Zones, Bjarni V. Tryggvason, David Surry and Alan G. Davenport, ST12:Dec 76:2333:12630
Probability Distributions of Extreme Wind Speeds, Emil Simiu and James J. Filliben, ST9:Sept 76: 1861:12381

Hybrid Beams
Buckling of Welded Hybrid Steel I-Beams, David A. Nethercot, ST3:Mar 76:461:11965
Optimization of Unstiffened Hybrid Beams, Ken P. Chong, ST2:Feb 76:401:11907

Hybrid Computers
A Heuristic Game for Material Selection in Structural Design Using the Hybrid Computer, Rick R. Evans, Subhash C. Anand and Myron Spector, Preprint No.2737, Sept 76, 25pp.
Hybrid Computer Model of St. Venant Equations, Martin Oosterveld and Kaz Adamowski, HY10:Oct 76:1491:12467
Hybrid Techniques for Inelastic Dynamic Problems, Chang-Kuei Sun, ST4:Apr 75:889:11221

Hydraulic Design
Exact Solution of Gradually Varied Flow, Mohammad Akram Gill, HY9:Sept 76:1353:12406

Hydraulic Design for an Outlet Structure, Clifford D. Smith, WW76:Aug 76:1019

Hydraulic Excavation
Hydraulic Dredges, Including Boosters, Gail G. Gren, DIEE:Jan 76:115
The Sinking of the Amsterdam Metro, David Halperin, CE:Sept 75:92

Hydraulic Fill Dams
Dynamic Strength of Hydraulic Fill, Richard L. Meehan, TN: GT6:June 76:641:12169
Hydraulic Fill Dams/Earthquake Stability, Roney A. Heinz, CE:May 76:55
Properties of Soil in the San Fernando Hydraulic Fill Dams, Kenneth L. Lee, H. Bolton Seed, Izzat M. Idriss and Faiz I. Makdisi, GT8:Aug 75:801:11527

Hydraulic Fills
Dynamic Strength of Hydraulic Fill, Richard L. Meehan, TN: GT6:June 76:641:12169
Embankment Loading of Hydraulic Fill, Timothy K. Dahlstrand, Preprint No.2649, Apr 76, 14pp.
The Hawkins Hydraulic Fill Dam, Kenneth L. Lee and Wolfgang Roth, Preprint No.2662, Apr 76, 20pp.
Hydraulic Dredge Spoil for Land Reclamation, Carl W. Garbe and Kuei-wu Tsai, Preprint No.2678, Apr 76, 24pp.
Underwater Placement of Sand Fill at Port of Portland Terminal #6, Loren R. Anderson and John Ramage, Preprint No.2718, Apr 76, 20pp.
Vibroflotation Compaction of Granular Hydraulic Fills, Ralph E. Brown, Preprint No.2657, Apr 76, 30pp.

Hydraulic Gradient
Exact Solution of Gradually Varied Flow, Mohammad Akram Gill, HY9:Sept 76:1353:12406

Hydraulic Gradients
Hydraulic Design for an Outlet Structure, Clifford D. Smith, WW76:Aug 76:1019

Hydraulic Jets
Pressure Fluctuations in Submerged Jump, S. Narasimhan and V. P. Bhargava, HY3:Mar 76:339:12004

Hydraulic Jump
Air-Entrainment in High Head Gated Conduits, Hari R. Sharma, HY11:Nov 76:1629:12523
Boundary Shear Stress as an Index of Hydraulic Jump Performance, Ronald E. Nece and Khalid Mahmood, WW76:Aug 76:978
Circular Jumps, Subhash C. Mehrotra, HY8:Aug 74:1133:10758
Flow Characteristics of Sloping Channel Jumps, Nallamuthu Rajaratnam and Valupadas Mura Hari, HY6:June 74:731:10594
Giuseppe Venturoli, Pioneer in Channel Studies, Rene Chevray, HY10:Oct 76:1533:12488
Hydraulic Design for an Outlet Structure, Clifford D. Smith, WW76:Aug 76:1019
Length of Hydraulic Jump, Subhash C. Mehrotra, HY7:July 76:1027:12272
Pressure Fluctuations in Submerged Jump, S. Narasimhan and V. P. Bhargava, HY3:Mar 76:339:12004
Rapid Temperature Reduction of Thermal Discharge, Ronald D. Townsend and David L. Egar, HY5:May 75:529:11312
Speed of Ships in Restricted Navigation Channels, R. Bryan Schofield, WW2:May 74:133:10539
Stilling Basin Design for Low Froude Number, Nani G. Bhowmik, HY7:July 75:901:11448
Wall Jet Analogy to Hydraulic Jump, Rangaswami Narayanan, HY3:Mar 75:347:11172

Hydraulic Models
Breakwater Back Slope Stability, James R. Walker, Robert Q. Palmer and James W. Dunham, OE75:June 75:879
Brink Depth for Trapezoidal Broad-Crested Weir, Birendra N. Neogy, HY12:Dec 72:2171:9427
Control of High Velocity Flow Into a Tidal Basin, Alex Sheydayi, WW76:Aug 76:999
Diversion Tunnel Capacity Without Backwater in Diverted Flow, Georgije Hajdin and Cedo Maksimovic, WW76:Aug 76:993
Evaluating Rainfall-Runoff Model Performance, Ian D. Moore and Russell G. Mein, TN: HY9:Sept 76:1390:12368
Flow at Grade-Break from Mild to Steep Slopes, Richard G. Weyermuller and M. Gamal Mostafa, HY10:Oct 76:1439:12458
Flow-Induced Vibration of Vertical-Lift Gate, J. David Hardwick, HY5:May 74:631:10546
Hydraulic Design for an Outlet Structure, Clifford D. Smith, WW76:Aug 76:1019
Hydraulic Design of Vertical Stilling Wells, Philip H. Burgi, HY7:July 75:801:11451
Hydraulic Modeling of Shallow Cooling Ponds, Jean-Claude Tatinclaux, Subhash C. Jain and William W. Sayre, PO1:July 75:43:11415
Hydraulic Modeling Techniques in a Backwater Area, Phil G. Combs, Nolan K. Raphelt and James E. Foster, WW76:Aug 76:232
Independent Comparison of Three Urban Runoff Models, David P. Heeps and Russell G. Mein, HY7:July 74:995:10685
Interaction of Plane Waves with a Row of Cylinders, Bradford W. Spring and Peter L. Monkmeyer, OE75:June 75:979
Lower Granite Lock — Prototype Performance, George C. Richardson, WW76:Aug 76:1442
Low-Head Air Regulated Siphons, Christopher R. Head, HY3:Mar 75:329:11155
Major Junction Structure Verified by Modeling, Charles H. Lawrance and Munson W. Dowd, HY4:Apr 76:499:12066
Missouri River Computerized Data Bank, Glendon T. Stevens, Jr. and Bob Pierce, WW76:Aug 76:725
Model of Hurricane Tide in Cape Fear Estuary, James E. Overland and Vance A. Myers, WW4:Nov 76:407:12549
A Model Study of St. Marys River Ice Navigation, James E. Cowley, J. W. Hayden and William W. Willis, WW76:Aug 76:1610
Physical Model Study of Border-Strip Irrigation, Graham A. Jobling and A. Keith Turner, IR4:Dec 73:493:10195
Planning the Tehachapi Crossing, Alfred R. Golze, HY1:Jan 75:1:11052
Real Time Model of the Nitrogen Cycle in an Estuary, Tavit O. Najarian and Donald R.F. Harleman, Preprint No.2676, Apr 76, 30pp.
Regime Studies of the Lower Fraser, Alfred John Tamburi, WW76:Aug 76:1680
River Basin Model for Simulating Flood Control Alternatives, Norbert L. Ackermann and Hiro Shigai, WW76:Aug 76:348
Selection of Models for Urban Drainage Problems: Technical Aspects and Non-Technical Constraints, Paul E. Wisner, Adel F. Ashmalla and Patrick A. Ahern, IR76:July 76:246
The Semi-Submersible Storage and Production Unit, Frank N. Biewer, Preprint No.2639, Apr 76, 25pp.
Sensitivity of Estuarine Circulation Model, John D. Wang, OE75:June 75:1035
Stability Problems for the Navigation Channel in a Tidal River, Egon Giese, WW76:Aug 76:280
Study on the Wind-Wave Characteristics in Model Harbor, G. S. Liu and Frederick L.W. Tang, OE75:June 75:706
Use of Depth Profiles for Flow-Model Calibration, Harvey E. Jobson and Thomas N. Keefer, WW76:Aug 76:641
Verification of Hydroelastic Similitude Criteria, Otto Haszpra, HY4:Apr 76:469:12048
Wave Period Effect on the Stability of Riprap, John P. Ahrens and Bruce L. McCartney, OE75:June 75:1019

Hydraulic Properties
Hydraulic Representation of Flow Cross Sections, Sun-Fu Shih and Robert L. Hamrick, TN: IR1:Mar 76:175:11955
Roughness Characteristics of the Lower Mississippi, Lamont G. Robbins, WW76:Aug 76:1209

Hydraulics
Analysis of Flow through Vegetation, Sylvester Petryk, HY7:July 75:871:11457
Analysis of Multiple Objectives in Water Quality, Yacov Y. Haimes and Warren A. Hall, HY4:Apr 75:387:11234
Applicability of Unit Stream Power Equation, Chih Ted Yang and John B. Stall, HY5:May 76:559:12103
Application of Finite Element Method to Open Channel Flow, Date H. Keuning, HY4:Apr 76:459:12053
Aquifer Parameter Identification, William Wen-Gong Yeh, HY9:Sept 75:1197:11582
ASCE Urban Water Resources Research Program, Murray B. McPherson and George F. Mangan, Jr., HY7:July 75:847:11445
Aspects of Hydrological Effects of Urbanization, William J. Schneider, Chmn., HY5:May 75:449:11301
Automated Wet Sand Feeder for Open-Circuit Flumes, Michael G. Foley and Elton F. Daly, TN: HY1:Jan 76:136:11820
Bed Form Response to Nonsteady Flows, D. Michael Gee, HY3:Mar 75:437:11195
The Bed-Load Function, Spyridon Beltaos, TN: HY1: Jan 76:131:11820
Boundary Shear in Channel with Flood Plain, Robert C. Myers and Elsayed M. Elsawy, HY7:July 75: 933:11452
Boundary Shear Stress Measurement by Preston Tube, Malcolm Hollick, TN: HY7:July 76:1053: 12228
Brink Depth for Trapezoidal Broad-Crested Weir, Birendra N. Neogy, HY12:Dec 72:2171:9427
Buoyant Forced-Plumes in Cross Flow, Vincent H. Chu and Michael B. Goldberg, HY9:Sept 74:1203: 10805
Cavitation Control by Aeration of High-Velocity Jets, Glenn L. Beichley and Danny L. King, HY7:July 75:829:11462
Channel Flow Over Permeable Beds of Graded Spheres, Anthony F.E. Zagni and Kenneth V.H. Smith, HY2:Feb 76:207:11892
Circular Jumps, Subhash C. Mehrotra, HY8:Aug 74: 1133:10758
Classification and Analysis of River Processes, Rolf Kellerhals, Michael Church and Dale I. Bray, HY7: July 76:813:12232
Classification of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY10:Oct 75:1315: 11643
Climatological Estimates of Evapotranspiration, Fred I. Morton, HY3:Mar 76:275:11974
Comparison of Four Numerical Methods for Flood Routing, Roland K. Price, HY7:July 74:879:10659
Comparison of Single-Point Injections in Pipe Flow, Ahmed M. Ger and Edward R. Holley, HY6:June 76:731:12172
Comparison of Warm Water Evaporation Equations, Richard N. Weisman, HY10:Oct 75:1303:11620
Comprehensive Water Quality Management Planning, Kenneth A. Bartal and Leonardo V. Gutierrez, Jr., HY4:Apr 75:371:11263
Computation of Tidal Flow in Well-Mixed Estuaries, Carl E. Pearson and Donald F. Winter, HY3:Mar 76:367:11990
Continuous Hydrological Time-Series Discretization, Luis Valadares Tavares, HY1:Jan 75:49:11063
Data Reduction Methods for Hydrologic Analysis, Keith L. Lewinger, Daniel P. Loucks and Edward A. McBean, HY1:Jan 75:17:11053
Design of Alternating Diffuser Pipes, Aleksandar Nospal and Jean-Claude Tatinclaux, TN: HY4:Apr 76:553:12018
Design of Conduit System with Diverging Branches, Kwang-Ping Yang, Tung Liang and I-Pai Wu, HY1: Jan 75:167:11080
Design of Pressure Transient Control System, Morris Driels, HY5:May 75:437:11280
Determining Ambient Water Temperatures, Mark Markofsky and Roger C. Binkerd, HY3:Mar 75: 361:11171
Developing Region in Self-Aerated Flows, Robert J. Keller, K. K. Lai and Ian R. Wood, HY4:Apr 74: 553:10501
Development of Storm Drainage Cost Functions, Neil S. Grigg and John P. O'Hearn, HY4:Apr 76: 515:12069
Dimensionless Inlet Hydrograph Model, Robert M. Ragan, Morris J. Root and John F. Miller, HY9: Sept 75:1185:11580
Dimensionless Solution of Dam-Break Flood Waves, John G. Sakkas and Theodor Strelkoff, HY2:Feb 76:171:11910
Discharge Equations for HS, H, and HL Flumes, Wendell R. Gwinn and Donald A. Parsons, HY1: Jan 76:73:11874
Discharge over Polygonal Weirs, Horst Indlekofer and Gerhard Rouve, HY3:Mar 75:385:11178
Drawdown in Compressible Unconfined Aquifer, Tatiana D. Streltsova, HY11:Nov 74:1601:10950
Dynamic Behavior Model of Ephemeral Stream, Kenneth G. Renard and Emmett M. Laursen, HY5: May 75:511:11315
Effect of Wind Stress on Stratified Deep Lake, Niels-Erik Ottesen Hansen, HY8:Aug 75:1037:11484
Effects of Urbanization on Catchment Response, Rafael L. Bras and Frank E. Perkins, HY3:Mar 75: 451:11196
Entrainment and Drag Forces of Deflected Jets, Daniel T.-L. Chan, Jung-Tai Lin and John F. Kennedy, HY5:May 76:615:12141
Environmental Aspects—Sacramento Bank Protection, Charles S. Mifkovic and Margaret S. Petersen, HY5:May 75:543:11326
Environmental Values and Water Quality Planning, Peter Richerson and Robert Johnston, HY2:Feb 75: 259:11136
Estimating Stock Water Use in Rural Water Systems, Robert S. Schulz and T. Al Austin, HY1:Jan 76:15: 11843
Estimation of Washload Produced on Certain Small Watersheds, Oswald Rendon-Herrero, HY7:July 74: 835:10638
Experimental Study of Turbulent Stratified Shearing Flow, Vincent H. Chu and Madanlal R. Vanvari, HY6:June 76:691:12205
Explicit Equations for Pipe-Flow Problems, Prabhata K. Swamee and Akalank K. Jain, HY5:May 76:657: 12146
Explicit Working for Turbulent Pipe Flow Problems, David I.H. Barr, TN: HY5:May 76:667:12129
Extreme Roughness of Natural River Channel, Hans J. Leutheusser and W. Orville Chisholm, HY7:July 73:1027:9831
Factors Determining Bed Forms of Alluvial Streams, Vito A. Vanoni, HY3:Mar 74:363:10396
Fibrous Concrete Repair of Cavitation Damage, Ernest K. Schrader and Anthony V. Munch, CO2: June 76:385:12198
Fifty-Year Development of Upstream Flood-Control Works Construction, Charlie M. Moore, CO3:Sept 75:477:11543
Finite Element Model for Cohesive Sediment Transport, Ranjan Ariathurai and Ray B. Krone, HY3:Mar 76:323:11987
Finite Element Solution of Saint-Venant Equations, Richard L. Cooley and Syed Afaq Moin, HY6:June 76:759:12213
Flood Estimation from Short Records, Walter C. Boughton, HY3:Mar 76:241:11996
Flood Proofing Regulations for Building Codes, Armando C. Lardieri, HY9:Sept 75:1155:11576
Floods Predicted From Rainfall Frequencies, Lee Robinson and Theodore T. Williams, HY10:Oct 72: 1773:9294
Flow and Bed Topography in Channel Bends, Frank Engelund, HY11:Nov 74:1631:10963

Flow Characteristics of Sloping Channel Jumps, Nallamuthu Rajaratnam and Valupadas Mura Hari, HY6:June 74:731:10594
Flow-Induced Forces on Protruding Walls, Eduard Naudascher and Frederick A. Locher, HY2:Feb 74: 295:10347
Flow-Induced Vibration of Vertical-Lift Gate, J. David Hardwick, HY5:May 74:631:10546
Flow Resistance in Broad Shallow Grassed Channels, Cheng-lung Chen, HY3:Mar 76:307:11994
Flows Split in Closed Loops Expending Least Energy, Madan L. Arora, TN: HY3:Mar 76:455: 11954
Fluid-Dynamic Excitation Involving Flow Instability, Wallace W. Martin, Eduard Naudascher and Mahadevan Padmanabhan, HY6:June 75:681:11361
Free Surface Slopes at Controls in Channel Flow, David L. Wilkinson, HY8:Aug 74:1107:10753
Gas Release During Transient Cavitation in Pipes, C. Kranenburg, HY10:Oct 74:1383:10892
Gross Parameter Solutions of Jets and Plumes, Klas Cederwall, HY5:May 75:489:11285
Ground-Water Recharge Simulation, Abnish C. Amar, HY9:Sept 75:1235:11588
Hans A. Einstein's Contributions in Sedimentation, Hsieh W. Shen, HY5:May 75:469:11290
Heat Disposal in Water Environment, Donald R.F. Harleman, HY9:Sept 75:1117:11585
Hydraulic Design of Vertical Stilling Wells, Philip H. Burgi, HY7:July 75:801:11451
Hydraulic Performance of Tilting-Disk Check Valves, Ronald S. Kane and Soung M. Cho, HY1:Jan 76: 57:11873
Hydrogeology and Water Quality Management, Ronald A. Landon, HY2:Feb 75:285:11137
Hydrology of Porous Pavement Parking Lots, Thomas J. Jackson and Robert M. Ragan, HY12: Dec 74:1739:11010
Impinging Circular Turbulent Jets, Spyridon Beltaos and Nallamuthu Rajaratnam, HY10:Oct 74:1313: 10852
Implicit Numerical Modeling of Unsteady Flows, Michael Amein and Hsiao-Ling Chu, HY6:June 75: 717:11378
Improved Design of Highway Culvert, Jerome M Normann, CE:Mar 75:70
Independent Comparison of Three Urban Runoff Models, David P. Heeps and Russell G. Mein, HY7:July 74:995:10685
Instability in Tidal Flow Computational Schemes, T. John Weare, HY5:May 76:569:12100
Interaction of Multiple Jets with Ambient Current, Ralph R. Boericke, HY4:Apr 75:357:11247
Jet Discharge into a Stratified Reservoir, Rufus B. Darden, Jorg Imberger and Hugo B. Fischer, HY9: Sept 75:1211:11583
Jet-Forced Circulations in Water-Supply Reservoirs, Rodney J. Sobey and Stuart B. Savage, HY12:Dec 74:1809:11026
John R. Freeman and His Influence on Hydraulics, John B. Drisko, Preprint No.2767, Sept 76, 10pp.
Laboratory Experiments with Surface Runoff, Ivan Muzik, HY4:Apr 74:501:10463
Local Erosion Caused by Rapid Forced Infiltration, Brian B. Willetts and Michael E. Drossos, HY12: Dec 75:1477:11796
Longitudinal Dispersion for Flow over Rough Beds, Nabil D.Abd El-Hadi and Kersi S. Davar, HY4:Apr 76:483:12049
Low-Head Air Regulated Siphons, Christopher R. Head, HY3:Mar 75:329:11155
Major Junction Structure Verified by Modeling, Charles H. Lawrance and Munson W. Dowd, HY4: Apr 76:499:12066
Mean Energy in Gradually Diverging Flow, Alan F. Babb and Jaime Amorocho, HY5:May 76:581: 12097
Mean Estimate Deficiencies in Water Quality Studies, Barry J. Adams and Robert S. Gemmell, HY7:July 75:989:11450
Measuring Water Velocity by Ultrasonic Flowmeter, Jack C. Schuster, HY12:Dec 75:1503:11806
Mechanism for Streamflow Meandering, Michael C. Quick, HY6:June 74:741:10587
Menabrea's Note on Waterhammer: 1858, Alexander Anderson, HY1:Jan 76:29:11831
Meter for Sewer Flow Measurement, Harry G. Wenzel, Jr., HY1:Jan 75:115:11070
Minimum Unit Stream Power and Fluvial Hydraulics, Chih Ted Yang, HY7:July 76:919:12238
Monetary Values of Life and Health, Bob Buehler, HY1:Jan 75:29:11047
Multiple Linearization Flow Routing Model, Thomas N. Keefer and Raul S. McQuivey, HY7:July 74: 1031:10668
Nebraska Flood-Plain Management Program—Part I, Albert E. Mathews, HY7:July 75:977:11437
New Diver-Operated Bedload Sampler, Dennis G. Waslenchuk, HY6:June 76:747:12179
Nonequilibriun River Form, Michael A. Stevens, Daryl B. Simons and Everett V. Richardson, HY5: May 75:557:11334
Nonlinear Channel Routing by Computer, Michael C. Quick and Anthony Pipes, HY6:June 75:651:11353
Numerical Computation of Two-Dimensional Flows, John P. Grubert, WW1:Feb 76:1:11891
Numerical Errors in Water Profile Computation, Edward A. McBean and Frank E. Perkins, HY11: Nov 75:1389:11694
Numerical Model of St. Lawrence River Estuary, David Prandle and Norman L. Crookshank, HY4: Apr 74:517:10472
Numerical Prediction of Thermal-Regime of Rivers, Poothrikka P. Paily and Enzo O. Macagno, HY3: Mar 76:255:11997
Objectives of Water Quality Planning, Keith S. Krause, HY3:Mar 75:471:11200
One-Dimensional Temperature Predictions in Unsteady Flows, Dominque N. Brocard and Donald R.F. Harleman, HY3:Mar 76:227:11982
Optimal Design for Highway Drainage Culverts, George K. Young, Jr., Mitchell R. Childrey and Roy E. Trent, HY7:July 74:971:10676
Optimal Operation of Multiple Resevoir System, Dale D. Meredith, HY2:Feb 75:299:11128
Optimal Pumping for Aquifer Dewatering, Eduardo Aguado, Irwin Remson, Mary F. Pikul and Will A. Thomas, HY7:July 74:869:10639
Oscillations in Surge Tanks, Mohammad Akram Gill, HY10:Oct 74:1369:10891
Perforated-Pipe Water Intake for Fish Protection, Richard T. Richards and Mark J. Hroncich, HY2: Feb 76:139:11900
Performance of Pennsylvania Highway Drainage Inlets, Arthur W. Brune, Walter H. Graf, Erik Appel and Peter P. Yee, HY12:Dec 75:1519:11801
Point Source Dispersion in Turbulent Open Channels, Kemal M. Atesmen, HY7:July 75:789: 11413
Portable Pier System Developed by Navy, CE:Mar 76:14
Predicting Cavitation in Sudden Enlargements, James W. Ball, J. Paul Tullis and Travis Stripling, HY7: July 75:857:11442
Prediction of Flood Volume from Small Humid Region Watersheds, Sie Ling Chiang, HY7:July 75: 817:11466
Prediction of Flow Development on Spillways, Robert J. Keller and Ashok K. Rastogi, HY9:Sept 75:1171:11581
Prediction of Mixing Lengths for River Flow Gaging, Peter R.B. Ward, HY7:July 73:1069:9856
Predictions of the Hydraulic and Morphological Changes of the "La Grande Riviere" Lower Reach System, Marcel Frenette and Octave Caron, WW76:Aug 76:1229
Pressure Fluctuations in Submerged Jump, S. Narasimhan and V. P. Bhargava, HY3:Mar 76:339: 12004
Private Constraints on Ground-Water Contamination, William R. Walker and William E. Cox, HY10:Oct 75:1333:11665
Problems in Integrating Water Programs, Eugene T. Jensen, HY3:Mar 75:467:11202
Radial Dispersion Through Adsorbing Media, Anand Prakash, HY3:Mar 76:379:11995
Rainfall Temporal Patterns for Design Floods, David H. Pilgrim and Ian Cordery, HY1:Jan 75:81:11057

Rapid Temperature Reduction of Thermal Discharge, Ronald D. Townsend and David L. Egar, HY5:May 75:529:11312
Regime Equations and Tidal Inlets, Curtis Mason, WW3:Aug 73:393:9952
Regional Sediment Yield Analysis of Alaska Streams, Gary L. Guymon, HY1:Jan 74:41:10255
Removal of Air from Water Lines by Hydraulic Means, Paul E. Wisner, Farrukh N. Mohsen and Nicholas Kouwen, HY2:Feb 75:243:11142
Reservoir Project Environmental Study, Merwin D. Dougal and Kenneth L. Dueker, HY9:Sept 75:1257:11578
Resistance to Flows in Alluvial Channels, ChiEmeka G. Ilo, HY6:June 75:665:11352
Review of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY11:Nov 75:1405:11693
River-Ice Problems: A State-of-the-Art Survey and Assessment of Research Needs, John F. Kennedy, Cochmn. and George D. Ashton, Cochmn., HY1:Jan 74:1:10281
River Regime with Special Reference to River Nile, Mohamed Bakr Khalil, HY1:Jan 75:135:11072
Roughness Effects on Rectangular Free Overfall, Nallamuthu Rajaratnam, Durfakula Muralidhar and Spyridon Beltaos, HY5:May 76:599:12152
Salinity Control and Federal Water Quality Act, Michael B. Bessler and John T. Maletic, HY5:May 75:581:11321
"Sedimentation Engineering," Manual and Report on Engineering Practice No. 54, ed. by Vito A. Vanoni (Book Review), Daryl B. Simons, CE:Mar 76:34
Sediment Flushing after Dredging in Tidal Bays, Klas Cederwall and Torbjorn Svensson, HY7:July 76:935:12229
Sediment Inertia as Cause of River Antidunes, Gary Parker, HY2:Feb 75:211:11127
Sediment Transport in Smooth Fixed Bed Channels, Pavel Novak and Chandramouli Nalluri, HY9:Sept 75:1139:11556
Selective Withdrawal Criteria of Stratified Fluids, Timothy W. Kao, HY6:June 76:717:12188
Sequential Deterministic Optimization in Reservoir Operation, Thomas E. Croley, II, HY3:Mar 74:443:10426
Shallow Laminar Flows over Rough Granular Surfaces, Harry O. Phelps, HY3:Mar 75:367:11166
Shear Distribution in Bends in Rectangular Channels, Dharam V. Varshney and Ramchandra J. Garde, HY8:Aug 75:1053:11513
Similitude in Free-Surface Vortex Formations, Larry L. Daggett and Garbis H. Keulegan, HY11:Nov 74:1565:10941
Simple Method for Predicting Dispersion in Streams, Raul S. McQuivey and Thomas N. Keefer, EE4:Aug 74:997:10708
Simple Nonlinear Model for Flood Estimation, Russell G. Mein, Eric M. Laurenson and Thomas A. McMahon, HY11:Nov 74:1507:10933
Simulation Accuracies of Gradually Varied Flow, J. Peter Jolly and Vujica Yevjevich, HY7:July 74:1011:10677
Simulation of Hydraulic Processes in Open Channels, Chao-Lin Chiu, Hsin-Chi Lin and Kazumasa Mizumura, HY2:Feb 76:185:11905
Skin Friction in Unsteady Laminar Pipe Flow, Mario F. Letelier S. and Hans J. Leutheusser, HY1:Jan 76:41:11867
Soil Erosion and Sediment Transport from Gullies, Robert F. Piest, Joe M. Bradford and George M. Wyatt, HY1:Jan 75:65:11069
Solid Particle Settlement in Open-Channel Flow, Ruh-Ming Li and Hsieh W. Shen, HY7:July 75:917:11460
Sparsity Oriented Analysis of Large Pipe Networks, M. Chandrashekar and K. H. Stewart, HY4:Apr 75:341:11260
Spillway Design for Series of Reservoirs, Catalino B. Cecilio, Brook A. Kraeger and Vefa Yucel, HY10:Oct 74:1329:10851
Stilling Basin Design for Low Froude Number, Nani G. Bhowmik, HY7:July 75:901:11448
Stochastic Analysis of Dune Bed Profiles, Baum K. Lee and Harvey E. Jobson, HY7:July 74:849:10657
Stochastic Considerations in Thunderstorm Modeling, Ross B. Corotis, HY7:July 76:865:12231
Studies on Seepage from Canals with Partial Lining, Kanakatti Subramanya, Madhira Radha Madhav and Govinda Chandra Mishra, HY12:Dec 73:2333:10197
Study of Fluid Movements through Causeway, Ralph Ta-Shun Cheng and Min-Hsiung Hu, HY1:Jan 75:155:11076
Submerged Buoyant Jets in Quiscent Fluids, Daniel T.L. Chan and John F. Kennedy, HY6:June 75:733:11383
Subsurface Environment—Private Property or Public Domain?, William R. Walker and William E. Cox, HY11:Nov 74:1699:10958
Suppression of Waves in Slotted-Walled Channel, Alfred M. Binnie, HY3:Mar 76:397:12006
Surface Runoff Hydrograph Equation, Vulli L. Gupta and Syed Afaq Moin, HY10:Oct 74:1353:10880
Surface Shear Waves, D. Howell Peregrine, HY9:Sept 74:1215:10809
Temperature Dynamics in Dimictic Lakes, Heinz Stefan and Dennis E. Ford, HY1:Jan 75:97:11058
Tests of Scour Protection for Bridge Piers, Chesley J. Posey, HY12:Dec 74:1773:11017
Three-Dimensional Pollutant Modeling in Shear Flow, Gour-Tsyh Yeh, HY3:Mar 76:351:12005
Time of Concentration of Overland Flow, Vulli L. Gupta and Peter J. Sinclair, TN: HY4:Apr 76:547:12018
Transformation of Moody Diagram, Krishna C. Asthana, HY6:June 74:797:10624
Transient Aquifer Flows by Characteristics Methods, E. Benjamin Wylie, HY3:Mar 76:293:12001
Transient Control in Lower Sacramento River, Fred J. Gientke, HY3:Mar 74:405:10418
Transient Dispersion in Uniform Media Flow, Hung Tao Shen, HY6:June 76:707:12202
Transverse Dispersion in Oscillatory Channel Flow, Peter R.B. Ward, HY6:June 74:755:10589
Trouble in Paradise, Harry E. Schwarz and Maria R. Eigerman, HY5:May 75:603:11296
Turbulent Flow of Power-Law Fluids, Abdul I.Y. Mohammed, Narendra N. Gunaji and Phillip R. Smith, HY7:July 75:885:11459
Turbulent Jets with Reversible Buoyancy, Subhash C. Jain and Jose M. Pena, HY9:Sept 75:1221:11586
Underground Liquid Waste Disposal, Don L. Warner, Chmn., HY3:Mar 75:421:11191
Upstream Flood Lowering in Reservoirs, Bob Buehler, HY2:Feb 76:151:11911
Urban Runoff by Linearized Subhydrographic Method, Jong-Song Chien and Krishan K. Saigal, HY8:Aug 74:1141:10766
Use of Decision Theory in Reservoir Operation, Samuel O. Russell, HY6:June 74:809:10586
Use of Satellite Data in Urban Hydrologic Models, Robert M. Ragan and Thomas J. Jackson, HY12:Dec 75:1469:11790
Verification of Hydroelastic Similitude Criteria, Otto Haszpra, HY4:Apr 76:469:12048
Vertical Temperature Profiles in Open-Channel Flow, Eric J. Schiller and William W. Sayre, HY6:June 75:749:11389
Vortex Suppression in Stilling Pond Overflow, Y. R. Reddy and John Pickford, HY11:Nov 74:1685:10969
Wall Jet Analogy to Hydraulic Jump, Rangaswami Narayanan, HY3:Mar 75:347:11172
Wall Shear Measurment in Sand-Water Mixture Flows, Oner Yucel and Walter H. Graf, HY7:July 75:947:11453
Wastewater Disposal by Submerged Manifolds, Paul Liseth, HY1:Jan 76:1:11839
Water Hammer in Coaxial Pipe Systems, Werner Burmann, HY6:June 75:699:11374
Water Quality Dimensions of Water Resources Planning, David H. Howells, HY2:Feb 75:277:11146
Water Supplies for Low-Income Communities in Developing Countries, Richard G. Feachem, EE5:Oct 75:687:11608

Water Waves Generated by Landslides in Reservoirs, D. Donald Davidson and Bruce L. McCartney, HY12:Dec 75:1489:11791
Winter-Regime Thermal Response of Heated Streams, Poothrikka P. Paily, Enzo O. Macagno and John F. Kennedy, HY4:Apr 74:531:10479

Hydraulic Structures

Discharge Computations at River Control Structures, Dannie L. Collins, HY7:July 76:845:12237
Discharge over Polygonal Weirs, Horst Indlekofer and Gerhard Rouve, HY3:Mar 75:385:11178
Experimental Investigation of Flow Over Side Weirs, Ahmed El-Khashab and Kenneth V.H. Smith, HY9: Sept 76:1255:12402
Passage of Ice at Hydraulic Structures, Darryl J. Calkins and George D. Ashton, WW76:Aug 76: 1726
Stability of Structures with Intermediate Filters, Amrik S. Chawla, HY2:Feb 75:223:11139
Tentative Program for the Solution of the Sula Valley Flood Problem, Ricardo Alduvin A., WW76:Aug 76:892
Thames Barrier Project, P. A. Cox, P. J. Clark and G. Miller-Richards, WW76:Aug 76:852

Hydraulic Tests

Predictions of the Hydraulic and Morphological Changes of the "La Grande Riviere" Lower Reach System, Marcel Frenette and Octave Caron, WW76:Aug 76:1229

Hydraulic Test Units

Developing Region in Self-Aerated Flows, Robert J. Keller, K. K. Lai and Ian R. Wood, HY4:Apr 74: 553:10501

Hydraulic Transients

Start-Up Performance, Hyatt-Thermalito Power Complex, Haywood G. Dewey, Jr., Robert W. Ehrhart and William H. Young, PO2:Nov 73:405: 10169

Hydraulic Transportation

Hydraulic Transport of Copper Tailings, Pablo Kleiman, TN: HY10:Oct 76:1589:12444
Reclamation of Wood-Chip Carrier Water, Joe M. Shane, Neil S. Hawthorne and Takashi Asano, EE2:Apr 75:215:11231

Hydrodynamic Pressure

Hydrodynamic Forces and Moments for Oscillating Cylinders, Yong Kwun Chung and Martha I. Coleman, OE75:June 75:899
On Green's Function Techniques for Solutions of Floating Body Problems, Rong-Tai Ho and Ami Harten, OE75:June 75:939
Probabilistic Approach to Design of Riprap for River Bank Protection, Ruh-Ming Li, Daryl B. Simons, Paul H. Blinco and Md. Abdus Samad, WW76:Aug 76:1572
Wave Forces on Vertical Circular Cylinder, Subrata K. Chakrabarti, Allan L. Wolbert and William A. Tam, WW2:May 76:203:12140

Hydrodynamics

Dense Effluent Dispersion in a Stream, Henry Crew and Robert O. Reid, EM1:Feb 76:77:11915
Drag and Inertia Coefficients in Oscillatory Flow About Cylinders, C. J. Garrison, Preprint No.2693, Apr 76, 24pp.
Dynamic Effects of Ship Passage on Moored Vessels, Shen Wang, WW3:Aug 75:247:11501
Forces on Many Cylinders Near a Plane Boundary, Tokuo Yamamoto and John H. Nath, Preprint No.2633, Apr 76, 19pp.
Hydrodynamic Forces and Moments for Oscillating Cylinders, Yong Kwun Chung and Martha I. Coleman, OE75:June 75:899
Hydrodynamic Forces on Cables Subject to Frequency Varied Motion, Robert W. Haas and Richard F. Dominguez, Preprint No.2728, Apr 76, 26pp.
Numerical Prediction of Thermal-Regime of Rivers, Poothrikka P. Paily and Enzo O. Macagno, HY3: Mar 76:255:11997
Prediction of Wind Wave Heights, Henry T. Falvey, WW1:Feb 74:1:10324
Role of Eddy Diffusivity in Thermocline Formation, Brian Henderson-Sellers, EE3:June 76:517:12174
The Semi-Submersible Storage and Production Unit, Frank N. Biewer, Preprint No.2639, Apr 76, 25pp.
Temperature Dynamics in Dimictic Lakes, Heinz Stefan and Dennis E. Ford, HY1:Jan 75:97:11058
Wave Forces on Bottom-Mounted Large-Diameter Cylinder, C. J. Garrison, Frederick H. Gehrman and Brian T. Perkinson, WW4:Nov 75:343:11699
Wave-Induced Mass Transport in Water Waves, Robert A. Dalrymple, WW2:May 76:255:12158
Wave Induced Pressures on Submerged Plates, William W. Durgin and Jong-Chiang Shiau, WW1: Feb 75:59:11098
Winter-Regime Thermal Response of Heated Streams, Poothrikka P. Paily, Enzo O. Macagno and John F. Kennedy, HY4:Apr 74:531:10479

Hydroelasticity

Flow-Induced Vibration of Vertical-Lift Gate, J. David Hardwick, HY5:May 74:631:10546
Verification of Hydroelastic Similitude Criteria, Otto Haszpra, HY4:Apr 76:469:12048

Hydroelectric Power Generation

Computer Use for River Regulation, Charles E. Abraham, HY2:Feb 75:291:11140
Conowingo-Peach Bottom Energy Complex: Financial, Legal and Public Relations Aspects, W. H. Johnson, EFEEC:Aug 75:292
Construction of Grand Coulee Third Power Plant, Donald J. Duck, CO4:Dec 75:869:11774
Energy Complexes — Conceptual Arrangements, Ralph W. Gunwaldson, EFEEC:Aug 75:19
Inland Site Location in the Northeast with Emphasis on Water Supply Needs, Clarence N. Freeman and John H. Dixon, EFEEC:Aug 75:92
Integrated River System Operation in a Major Flood, Alfred J. Cooper and Clifford A. Roberts, PO1:Jan 76:63:11825
The Le Grande Hydroelectric Development, Gilles Bergevin and Richard N. Seemel, CE:Sept 76:60
Long-Term Operation of Storage Hydro Projects, W. F. Caselton and Samuel O. Russell, WR1:Apr 76: 163:12089
Operations Models for Central Valley Project, Leonard Becker, William W-G. Yeh, Dan M. Fults and Donald Sparks, WR1:Apr 76:101:12062
Optimal Development of Multipurpose Hydro Projects, Phillip R. Hoffman, PO1:July 74:43:10655
Reclamation and Western Development, Donald J. Duck, WW76:Aug 76:1114
Runner Diameter of Tubular Turbines, Ekkehard Heinemann, Klaus-Dieter Kraft and Gerhard Rouve, PO1:Jan 76:53:11833
Shih-Kang Dam Multi-Purpose Development Project, Walter Chin Mih, WW76:Aug 76:1630
Start-Up Performance, Hyatt-Thermalito Power Complex, Haywood G. Dewey, Jr., Robert W. Ehrhart and William H. Young, PO2:Nov 73:405: 10169
Water and Electric Power in the Pacific Northwest, Fred A. Limpert, EFEEC:Aug 75:80
Water and Power in the Northeast, Eugene O'Brien, Clarence N. Freeman and John H. Dixon,, PO2: Nov 76:195:12574
Water Supply for Energy Complexes in Water-Short Regions, Gilbert G. Stamm and Kenneth O. Kauffman, EFEEC:Aug 75:147

Hydroelectric Powerplants

Fish Impingement at Monticello Nuclear Plant, Laurence M. Grotbeck and James L. Bechthold, PO1:July 75:69:11409
Keowee-Toxaway Power Project — OUTSTANDING, Roney A. Heinz, CE:June 75:46
Three-Dimensional Analysis of Hydroelectric Power Station, Prem S. Nigam, Om P. Jain and Mahesh B. Kanchi, PO1:Jan 76:35:11830

Hydrogen Bonding
Virus-Coal Sorption Interaction, Pushpavadan P. Oza and Malay Chaudhuri, EE6:Dec 76:1255:12633

Hydrogen Fuels
Converting Solar Energy to Hydrogen: Answer to U.S.'s Long-Range Energy Needs?, Dean Garyet, CE:Jan 76:63

Hydrogeology
Hydrogeology and Water Quality Management, Ronald A. Landon, HY2:Feb 75:285:11137

Hydrograph Analysis
Runoff Files for Flood Hydrograph Simulation, Alan M. Lumb and L. Douglas James, HY10:Oct 76: 1515:12499
Surface Runoff Hydrograph Equation, Vulli L. Gupta and Syed Afaq Moin, HY10:Oct 74:1353:10880

Hydrographic Surveys
Automated Hydrographic Survey Systems, Pressley L. Campbell, OE75:June 75:1181
Automated Hydrography in the Philadelphia District, Henry R. Spies, Preprint No.2764, Sept 76, 14pp.
Critical Areas for Research in Oceanographic and Hydrographic Surveying and Charting, Harold D. Palmer, SU1:Oct 75:43:11627
Impact of Dredging on River System Morphology, Peter F. Lagasse and Daryl B. Simons, WW76:Aug 76:434

Hydrographs
Dimensionless Inlet Hydrograph Model, Robert M. Ragan, Morris J. Root and John F. Miller, HY9: Sept 75:1185:11580
Estimation of Lateral Inflow Hydrographs, Maria Mimikou and Ramachandra A. Rao, WW76:Aug 76:399
Optimal River Cross Sections for Flood Routing, V. Seetharama Rao, Dinshaw N. Contractor and Chinchai Tiyamani, WW76:Aug 76:421
Simple Nonlinear Model for Flood Estimation, Russell G. Mein, Eric M. Laurenson and Thomas A. McMahon, HY11:Nov 74:1507:10933
Surface Runoff Hydrograph Equation, Vulli L. Gupta and Syed Afaq Moin, HY10:Oct 74:1353:10880
Synthetic Design Hyetograph and Rational Runoff Coefficient, Jong-Song Chien and Simsek Sarikelle, IR3:Sept 76:307:12375
Time-Reversed Unsteady Flow Computations in Waterways, Hsiao-Ling Chu, WW76:Aug 76:1535

Hydrography
Automated Hydrography in the Philadelphia District, Henry R. Spies, Preprint No.2764, Sept 76, 14pp.
Determining Ambient Water Temperatures, Mark Markofsky and Roger C. Binkerd, HY3:Mar 75: 361:11171
Impact of Dredging on River System Morphology, Peter F. Lagasse and Daryl B. Simons, WW76:Aug 76:434
Satellite Observations of Water Quality, Graham P. Harris, Robert P. Bukata and J. Edward Bruton, TE3:Aug 76:537:12300
Statistical Design Basis for Submerged Diffuser, Thomas E. Pease and Michael J. Skelly, PO1:July 75:11:11408

Hydrologic Data
Computer Use for River Regulation, Charles E. Abraham, HY2:Feb 75:291:11140
Continuous Hydrological Time-Series Discretization, Luis Valadares Tavares, HY1:Jan 75:49:11063

Hydrologic Models
Dimensionless Inlet Hydrograph Model, Robert M. Ragan, Morris J. Root and John F. Miller, HY9: Sept 75:1185:11580
General Linear Hydrologic Response Models, Fazal H. Chaudhry, WW76:Aug 76:367
Predicting Estuarine Salinity from River Inflows, James A. Harder, Preprint No.2674, Apr 76, 23pp.
Runoff Files for Flood Hydrograph Simulation, Alan M. Lumb and L. Douglas James, HY10:Oct 76: 1515:12499
Seasonal and Nonseasonal ARMA Models in Hydrology, Pen-Chih Tao and Jacques W. Delleur, HY10:Oct 76:1541:12477
A Subsurface Drainage Cost and Hydrologic Model, Ashim K. Bhattacharya, Nader Foroud, Sie-tan Chieng and Robert S. Broughton, Preprint No.2773, Sept 76, 18pp.
Unit Hydrograph Parameters Versus Urbanization, David L. Gundlach, TN: IR3:Sept 76:388:12369

Hydrology
Aspects of Hydrological Effects of Urbanization, William J. Schneider, Chmn., HY5:May 75:449: 11301
Climatological Estimates of Evapotranspiration, Fred I. Morton, HY3:Mar 76:275:11974
Continuous Hydrological Time-Series Discretization, Luis Valadares Tavares, HY1:Jan 75:49:11063
Data Reduction Methods for Hydrologic Analysis, Keith L. Lewinger, Daniel P. Loucks and Edward A. McBean, HY1:Jan 75:17:11053
Dimensionless Inlet Hydrograph Model, Robert M. Ragan, Morris J. Root and John F. Miller, HY9: Sept 75:1185:11580
Dynamic Behavior Model of Ephemeral Stream, Kenneth G. Renard and Emmett M. Laursen, HY5: May 75:511:11315
Effect of Snow Cover on Upward Movement of Soil Moisture, Eugene L. Peck, IR4:Dec 74:405:10989
Effects of Urbanization on Catchment Response, Rafael L. Bras and Frank E. Perkins, HY3:Mar 75: 451:11196
Fifty-Year Development of Upstream Flood-Control Works Construction, Charlie M. Moore, CO3:Sept 75:477:11543
Hybrid Computer Model of St. Venant Equations, Martin Oosterveld and Kaz Adamowski, HY10:Oct 76:1491:12467
Hydrology and Water Resources Planning in America: 1776 to 1976, Ray K. Linsley, Preprint No.2754, Sept 76, 12pp.
The Hydrology of the Upper 12-in. (30-cm) of Well-Drained, Imperfectly Drained, and Poorly Drained Mineral Soil Profiles, Peter S. Chisholm and Robert W. Kirkness, IR76:July 76:193
Independent Comparison of Three Urban Runoff Models, David P. Heeps and Russell G. Mein, HY7:July 74:995:10685
Integrated River System Operation in a Major Flood, Alfred J. Cooper and Clifford A. Roberts, PO1:Jan 76:63:11825
Laboratory Experiments with Surface Runoff, Ivan Muzik, HY4:Apr 74:501:10463
Measuring Watershed Land-Use Changes with Airphotos, Donald B. Stafford, James T. Ligon and M. Eugene Nettles, TE1:Feb 76:117:11925
Multiple Linearization Flow Routing Model, Thomas N. Keefer and Raul S. McQuivey, HY7:July 74: 1031:10668
Nebraska Flood-Plain Management Program—Part II, James R. Cook, HY7:July 75:983:11438
Quantitative Assessment of Changes in Urban Runoff, Irina Cech and Karen Assaf, IR1:Mar 76: 119:11957
Rainfall Temporal Patterns for Design Floods, David H. Pilgrim and Ian Cordery, HY1:Jan 75:81:11057
Research Needs Relative to Environmental Data, Byron H. Willis, HY11:Nov 75:1423:11700
Seasonal and Nonseasonal ARMA Models in Hydrology, Pen-Chih Tao and Jacques W. Delleur, HY10:Oct 76:1541:12477
Simulation of Agricultural Runoff, Anthony S. Donigian, Jr. and Norman H. Crawford, Preprint No.2670, Apr 76, 27pp.
Soil-Moisture-Temperature for Alaskan Lowland, Gary L. Guymon, IR3:Sept 75:187:11562
Solutions to Green-Ampt Infiltration Equation, Ruh-Ming Li, Michael A. Stevens and Daryl B. Simons, IR2:June 76:239:12196

A Stochastic Approach to the Colorado River Basin, William L. Lane, Albert E. Gibbs and Robert B. Main, Preprint No.2684, Apr 76, 26pp.
Summer Moisture-Temperature for Arctic Tundra, Gary L. Guymon, IR4:Dec 76:403:12613
Surface Runoff Hydrograph Equation, Vulli L. Gupta and Syed Afaq Moin, HY10:Oct 74:1353:10880
Urban Runoff by Linearized Subhydrographic Method, Jong-Song Chien and Krishan K. Saigal, HY8:Aug 74:1141:10766
Urban Runoff Pollution Control—State-of-the-Art, Richard Field and John A. Lager, EE1:Feb 75:107:11129
Use of Satellite Data in Urban Hydrologic Models, Robert M. Ragan and Thomas J. Jackson, HY12:Dec 75:1469:11790
Water Harvesting — Modern Application of an Ancient Method, Allen R. Dedrick, CE:Oct 76:86

Hydrometeorology
Correlation Analysis of Hydrometeorological Data, Ashok N. Shahane, Daniel Thomas and Paul Bock, HY10:Oct 76:1561:12484

Hydroplaning
Porous Friction Course Solves Airport Hydroplaning Problem, Edward A. Johnson and Thomas D. White, CE:Apr 76:90

Hydrostatic Pressure
Stability Analysis of Cut Slopes at Auburn Dam, J. Lawrence Von Thun, GT76:Aug 76:349

Hyetographs
Synthetic Design Hyetograph and Rational Runoff Coefficient, Jong-Song Chien and Simsek Sarikelle, IR3:Sept 76:307:12375
Urban Runoff by Linearized Subhydrographic Method, Jong-Song Chien and Krishan K. Saigal, HY8:Aug 74:1141:10766

Hygiene
Working with the Health Client, James Falick, EFAN:Dec 74:116

Hyperbolic Parabolic Shells
Buckling Stress States of Hyperboloidal Shells, Ihsan Mungan, ST10:Oct 76:2005:12465
Design of Hipped Hypar Shells, Ahmed Shaaban and Milo S. Ketchum, ST11:Nov 76:2151:12543
Reinforced Concrete Hyperbolic Paraboloid Shells, Richard N. White, ST9:Sept 75:1961:11595
Stability of Hyperboloidal Shells, Daniel R. Veronda and Victor I. Weingarten, ST7:July 75:1585:11446
Stability of Pressurized Hyperboloidal Shells, Daniel R. Veronda and Victor I. Weingarten, EM5:Oct 75:663:11650
TWA Hangars of Thin Shell Design, Roney A. Heinz, CE:Jan 75:55

Hypolimnion
Comparative Study With Costs of Hypolimnetic Aeration, Arlo W. Fast, Marc W. Lorenzen and J. Harlan Glenn, EE6:Dec 76:1175:12629
Synoptic Survey of Hypolimnetic Aeration, Arlo W. Fast and Marc W. Lorenzen, EE6:Dec 76:1161:12628

Hysteresis
Inelastic Cyclic Response of Split K-Braced Frames, Movses J. Kaldjian, Preprint No.2788, Sept 76, 15pp.
Method for Random Vibration of Hysteretic Systems, Yi-Kwei Wen, EM2:Apr 76:249:12073

I Beams
Analysis of Some Double Layer Grids, Andrew G. Collings, ST8:Aug 76:1591:12342
Buckling of Inelastic I-Beams under Moment Gradient, Sritawat Kitipornchai and Nicholas S. Trahair, ST5:May 75:991:11295
Design of Diaphragm-Braced I-Beams, David A. Nethercot and Nicholas S. Trahair, ST10:Oct 75:2045:11615
Elastic Behavior of Tapered Monosymmetric I-Beams, Sritawat Kitipornchai and Nicholas S. Trahair, ST8:Aug 75:1661:11479
Inelastic Buckling of Simply Supported Steel I-Beams, Sritawat Kitipornchai and Nicholas S. Trahair, ST7:July 75:1333:11419
Laminated Timber Logging Bridges in British Columbia, Richard G. Scarisbrick, ST1:Jan 76:19:11832
Post-Buckling of Redundant I-Beams, Scott T. Woolcock and Nicholas S. Trahair, EM2:Apr 76:293:12054
Shear Failure Due to Web Crushing in Prestressed Concrete I-Beams, Larp Chitnuyanondh, T. Ivan Campbell, Barrington deV. Batchelor and Paul Csagoly, T76:Aug 76:476
State-of-the-Art Report on Ultimate Strength of I-Beam Bridge Systems, Conrad P. Heins, Chmn., ST5:May 75:1085:11323
Warping and Distortion at I-Section Joints, Porpan Vacharajittiphan and Nicholas S. Trahair, ST3:Mar 74:547:10390

Ice
Calculations to Test a Pack Ice Model, Max D. Coon, Roger Colony, Robert S. Pritchard and D. A. Rothrock, NMG:June 76:II-1210
Deep Sea Construction, S. Samuel Doughty, CO3:Sept 75:607:11575
A Difference Scheme for the AIDJEX Sea Ice Model, Robert S. Pritchard and Roger Colony, NMG:June 76:II-1194
Heat Transfer in Soil-Water-Ice Systems, Aditya Mohan, GT2:Feb 75:97:11123
Ice Removal From the Walls of Navigation Locks, Guenther E. Frankenstein, James L. Wuebben, H. H.G. Jellinek and R. Yokota, WW76:Aug 76:1487
A Model Study of St. Marys River Ice Navigation, James E. Cowley, J. W. Hayden and William W. Willis, WW76:Aug 76:1610
Passage of Ice at Hydraulic Structures, Darryl J. Calkins and George D. Ashton, WW76:Aug 76:1726
The Port of Philadelphia — Past and Present, Clarence F. Wicker, Preprint No.2774, Sept 76, 20pp.
River-Ice Problems: A State-of-the-Art Survey and Assessment of Research Needs, John F. Kennedy, Cochmn. and George D. Ashton, Cochmn., HY1:Jan 74:1:10281
Surface Currents in the Arctic and Sub-Arctic Seas as Deduced from Satellite Photographs of Ice Floes, Paul E. La Violette, OE75:June 75:1166
Theoretical Model of River Ice Jams, Mehmet S. Uzuner and John F. Kennedy, HY9:Sept 76:1365:12412

Ice Breakup
A Model Study of St. Marys River Ice Navigation, James E. Cowley, J. W. Hayden and William W. Willis, WW76:Aug 76:1610
Passage of Ice at Hydraulic Structures, Darryl J. Calkins and George D. Ashton, WW76:Aug 76:1726

Ice Control
A Model Study of St. Marys River Ice Navigation, James E. Cowley, J. W. Hayden and William W. Willis, WW76:Aug 76:1610
Passage of Ice at Hydraulic Structures, Darryl J. Calkins and George D. Ashton, WW76:Aug 76:1726

Ice Jams
Theoretical Model of River Ice Jams, Mehmet S. Uzuner and John F. Kennedy, HY9:Sept 76:1365:12412

Iceland
Ocean Wave Refraction Near Reykjavik, Iceland, Thorbjorn Karlsson and J. Eliasson, OE75:June 75:1232

Ice Openings
Passage of Ice at Hydraulic Structures, Darryl J. Calkins and George D. Ashton, WW76:Aug 76: 1726

Ice Prevention
Ice Removal From the Walls of Navigation Locks, Guenther E. Frankenstein, James L. Wuebben, H. H.G. Jellinek and R. Yokota, WW76:Aug 76:1487
Winter-Regime Thermal Response of Heated Streams, Poothrikka P. Paily, Enzo O. Macagno and John F. Kennedy, HY4:Apr 74:531:10479

Ice Removal
Ice Removal From the Walls of Navigation Locks, Guenther E. Frankenstein, James L. Wuebben, H. H.G. Jellinek and R. Yokota, WW76:Aug 76:1487

Ice Skating
Frost Heaves — A Major Dilemma for Ice Arenas, Bruce M. Thorson and J. S. Braun, CE:Mar 75:62

Idaho
Case History — Problems in Obtaining Repairs to Barber Dam, A. Kenneth Dunn, EFRLD:Sept 75:93
University of Idaho Barrel-Arch Roof Wins Outstanding Structural Engineering Award, CE: June 76:48
The University of Idaho Stadium: A Micro-Lam Application, Sherman A. Nelson, Preprint No.2800, Sept 76, 19pp.

Identification
System Identification of Frames under Seismic Loads, Nestor Distefano and B. Pena-Pardo, EM2: Apr 76:313:12047

Illinois
Economic Value of Dredged Material, Wyndham J. Roberts, DIEE:Jan 76:919
Illinois: First Steps in Bikeway Development, Jim Kashmier, BP75:Dec 75:75

Illite
Shearing Strength of Kaolinite, Illite, and Montmorillonite, Roy E. Olson, GT11:Nov 74: 1215:10947

Images
Civil Engineering Applications of Remote Sensing, David J. Barr and Wesley P. James, TE2:May 75: 279:11300
How Almost Anyone Can Design a Good Looking Bridge in One Easy Lesson, William Zuk, ST76: Aug 76:19
Image Error and Photogrammetric Requirements, G. Warren Marks, SU1:Dec 76:39:12607

Immunity
Legal Liability and Highway Design and Maintenance, David C. Oliver, TE3:Aug 75:425: 11481

Impact
Determination of the Missile Load for Steel Columns of a Nuclear Power Plant Structure, Zin-Tsai Shi, STN75:Dec 75:II-29
Development of Finite Element Head Injury Model, Theodore A. Shugar and Michael G. Katona, EM3: June 75:223:11367
Evaluation of Environmental Impact of Landfills, Patrick Caffrey, Martin David and Robert K. Ham, EE1:Feb 75:55:11119
Impact Assessment of Power Plants, D. Joseph Hagerty and John E. Heer, PO1:Jan 76:81:11823
Roadside Slope Design for Safety, Eugene L. Marquis and Graeme D. Weaver, TE1:Feb 76:61: 11922
Solutions of Impact Problems for Structural Dynamic Analyses, Robert J. McCaffery, STN75:Dec 75:II-47
Tornado-Borne Missile Speeds, James F. Costello, Emil Simiu and Martin R. Cordes, Preprint No.2739, Sept 76, 29pp.
Trouble in Paradise, Harry E. Schwarz and Maria R. Eigerman, HY5:May 75:603:11296

Impact Prediction
Air Passenger Handling Facilities: Future Planning-Design Impacts, Hanan A. Kivett, Chmn., TE3:Aug 76:461:12289
Construction Helmet Response Under Severe Impact, Werner Goldsmith, CO2:June 75:335:11349

Impact Shock
Dynamic Tornadic Wind Loads on Tall Buildings, Yi-Kwei Wen, ST1:Jan 75:169:11045

Impact Tests
Impact Assessment of Power Plants, D. Joseph Hagerty and John E. Heer, PO1:Jan 76:81:11823

Impedance
Dynamic Environment Simulation by Pulse Techniques, Sami F. Masri and Frederick B. Safford, EM1:Feb 76:151:11923

Impervious Linings
Impermeable Asphaltic Concrete Pond Liner, R. Dale Hinkle, Jr., CE:Aug 76:56

Impingement
Fish Impingement at Monticello Nuclear Plant, Laurence M. Grotbeck and James L. Bechthold, PO1:July 75:69:11409
Impinging Circular Turbulent Jets, Spyridon Beltaos and Nallamuthu Rajaratnam, HY10:Oct 74:1313: 10852
Oblique Impingement of Plane Turbulent Jets, Spyridon Beltaos, HY9:Sept 76:1177:12388

Impoundments
Low Flow Criteria for Diversions and Impoundments, Sie Ling Chiang and Fred W. Johnson, WR2:Nov 76:227:12553

Improvement
Synthesizing Taxicab Improvements, Joseph C. Corradino, TE4:Nov 76:793:12545

Incinerators
Energy Recovery from Refuse—State-of-the- Art, John Payne, EE2:Apr 76:281:12027
Practical Refuse Recycling, C. Edward Walter, EE1: Feb 76:139:11941
Synthetic Aggregate From Incinerator Residues, Horace R. Blank, EM1:Feb 76:31:11898

Income Analysis
Distribution of Benefits of Public Transit Projects, Arun Chatterjee and Kumares C. Sinha, TE3:Aug 75:505:11497

Incompressible Flow
Turbulent Flow of Power-Law Fluids, Abdul I.Y. Mohammed, Narendra N. Gunaji and Phillip R. Smith, HY7:July 75:885:11459

Indentation Hardness Tests
Constitutive Equations and Punch-Indentation of Concrete, Andrie C.T. Chen and Wai F. Chen, EM6:Dec 75:889:11809

Indexes
History of Indexing and Abstracting by the American Society of Civil Engineers, Irving Amron, Preprint No.2736, Sept 76, 25pp.

Indexing
History of Indexing and Abstracting by the American Society of Civil Engineers, Irving Amron, Preprint No.2736, Sept 76, 25pp.

India
Channelization of River Bhargavi, India, Bishnu P. Das, WW76:Aug 76:1700

Gap-Graded Concrete for Paving Construction, Ram Kinkar Ghosh and Mukul Ranjan Chatterjee, CO1: Mar 76:227:11988
Tehri Rockfill Dam, B. V.K. Lavania, GT9:Sept 75: 963:11587
Water Management in Indus River System, Riaz Nazir Tarar, WW76:Aug 76:813

Industrial Growth
Economic Role of the Waterway in Western Europe, Maurice Marchal, WW3:Aug 76:337:12346

Industrial Plant Location
Candidate Industries and General Island Locations, Daniel M. Bragg, OE75:June 75:751
Ocean Engineering in the Design of Sea Islands, Michael J. McCarthy, Edward J. Schmeltz and Joseph Bonasia, OE75:June 75:762

Industrial Wastes
Coal Pile Leachate—Quantity and Quality Characteristics, William C. Anderson and Mark P. Youngstrom, EE6:Dec 76:1239:12626
Dye Catalyzed Oxidation of Industrial Wastes, Jerome W. Sargent and Robert L. Sanks, EE5:Oct 76:879:12453
Legal Perspective on Water Quality Management, Douglas R. Blazey, HY5:May 75:595:11320
Removal of Heavy Metals from Industrial Effluents, Jim V. Rouse, EE5:Oct 76:929:12447
Shin-Shen Canal Diversion Structure — Taipei, Taiwan, Richard R. Deussen, WW76:Aug 76:1459
Will Industry Meet Water-Quality Goals?, Eugene E. Dallaire, CE:Dec 75:68
Yeast Plant Wastewater Treatment, Yeun C. Wu and Chiao F. Kao, EE5:Oct 76:969:12468

Industrial Waste Treatment
Industrial, Municipal Wastes Combined, Robert E. Hickman and Charles N. Smith, CE:Dec 76:68

Inelastic Action
Inelastic Analysis of Reinforced Concrete Frames, Leone Corradi, Osvaldo De Donato and Giulio Maier, ST9:Sept 74:1925:10832
Inelastic Buckling of Simply Supported Steel I-Beams, Sritawat Kitipornchai and Nicholas S. Trahair, ST7:July 75:1333:11419
Inelastic Spatial Stability of Restrained Beam-Columns, Sriramulu Vinnakota and Pentti Aysto, ST11:Nov 74:2235:10919
Local Unloading in Piecewise-Linear Plasticity, Osvaldo De Donato and Giulio Maier, EM3:June 76:383:12170
Seismic Analysis of Offshore Structures in the Inelastic Range, Joseph Kallaby, Preprint No.2722, Apr 76, 30pp.

Infectious Diseases
Health Considerations in Use of Tertiary Effluents, Robert C. Cooper, Preprint No.2723, Apr 76, 18pp.

Infectious Hepatitis
Disease Risks of Occupational Exposure to Sewage, C. Scott Clark, Edward J. Cleary, Gilbert M. Schiff, Clavin C. Linneman, Jr., John P. Phair and Terrence M. Briggs, EE2:Apr 76:375:12038

Infiltration
Analysis of Swelling-Soil Column Infiltration Test, Jacob Uzan, TN: GT9:Sept 76:1014:12367
Aspects of Hydrological Effects of Urbanization, William J. Schneider, Chmn., HY5:May 75:449: 11301
Discs Reduce Manhole Infiltration, Warren S. O'Sullivan, CE:Aug 75:77
Infiltration-Inflow Analysis, David J. Cesareo and Richard Field, EE5:Oct 75:775:11645
Infiltration Into Increasingly Permeable Soils, Herman Bouwer, IR1:Mar 76:127:11959
Local Erosion Caused by Rapid Forced Infiltration, Brian B. Willetts and Michael E. Drossos, HY12: Dec 75:1477:11796
Physical Model Study of Border-Strip Irrigation, Graham A. Jobling and A. Keith Turner, IR4:Dec 73:493:10195
Solutions to Green-Ampt Infiltration Equation, Ruh-Ming Li, Michael A. Stevens and Daryl B. Simons, IR2:June 76:239:12196
Use of Abandoned Gravel Pits as Spreading Grounds — Experience in Los Angeles County, Irving Sherman, IR76:July 76:461

Infiltration Capacity
Analysis of Swelling-Soil Column Infiltration Test, Jacob Uzan, TN: GT9:Sept 76:1014:12367

Infiltration Rate
Discs Reduce Manhole Infiltration, Warren S. O'Sullivan, CE:Aug 75:77
Infiltration Into Increasingly Permeable Soils, Herman Bouwer, IR1:Mar 76:127:11959

Inflow
Estimation of Lateral Inflow Hydrographs, Maria Mimikou and Ramachandra A. Rao, WW76:Aug 76:399
Infiltration-Inflow Analysis, David J. Cesareo and Richard Field, EE5:Oct 75:775:11645
Spatially Varied Flow in Channel Transitions, David T.Y. Kao and S. Dean Perry, WW76:Aug 76:1551

Influence Charts
Coefficients to Analyze Rectangular Slab Bridges, Iman Hossain, ST1:Jan 75:151:11048

Information
Current and Proposed Construction Research Studies, John D. Borcherding and Brennon P. Hatley, CO3: Sept 76:547:12423
Increased Productivity Through Effective Public Information, Michael J. Scanlon, PROD:Aug 76: 177
Logical Complexity in Engineering Specifications, Jimmy L. Noland, ST76:Aug 76:761
Presenting Trends in Lake Eutrophication, Stanley Hershman and Samuel O. Russell, TN: EE6:Dec 76:1281:12638

Information Capacity
Logical Complexity in Engineering Specifications, Jimmy L. Noland, ST76:Aug 76:761

Information Retrieval
Computer Cartography Offers County Unlimited Combinations and Considerable Savings, Vern Cartwright and Joseph P. Alessandri, CE:Nov 76:60
Computerized Inventory of Traffic Signs, Tapan K. Datta and David M. Litvin, TE4:Nov 75:707:11708
Construction Information Systems in Romania, Daniel W. Halpin and Nicolai Tutos, CO2:June 76: 335:12176
Data Reduction Methods for Hydrologic Analysis, Keith L. Lewinger, Daniel P. Loucks and Edward A. McBean, HY1:Jan 75:17:11053
Water Quality Management and Information Systems, William D. Haseman, Arthur Z. Lieberman and Andrew B. Whinston, HY3:Mar 75: 477:11185

Information Retrieval Effectiveness
Technical Information Processing Systems, William F. Bates, EI2:Apr 75:189:11254

Information Systems
Environmental Data Management, George K. Young and G. F. Tierney, WR2:Nov 76:255:12559
National Program of Inspection of Dams — *NATIONAL DAM INVENTORY*, Samuel H. Miles, EFRLD:Sept 75:23
Philadelphia's Water System Automation Plan, Carmen F. Guarino, Joseph V. Radziul, Alan Hess, Patrick R. Cairo, Robert E. Day and John J. Smith, Jr., EE5:Oct 76:953:12473
Productivity as Influenced by Design Management Processes, Winfield O. Salter, PROD:Aug 76:1

Information Theory
Information Models in Building Design Process, Alan D. Russell, EI2:Apr 75:133:11217

Infrared Heating
Enclosed Soak System for Deep Polymer Impregnation of Concrete Bridge Decks, Paul R. Blankenhorn, Richard E. Weyers, Donald E. Kline and Philip D. Cady, TE1:Feb 75:65:11102

Injection
Epoxy-Repaired Bolted Timber Connections, R. Richard Avent, Leroy Z. Emkin, Robert H. Howard and Charles L. Chapman, ST4:Apr 76:821:12061

Injection Wells
Underground Liquid Waste Disposal, Don L. Warner, Chmn., HY3:Mar 75:421:11191

Inland Waterways
Determining Needs and Benefits of an Island Port Project Under U.S. Army Corps of Engineers Regulations, Jimmy B. Allen, WW76:Aug 76:316
The Great River Study — A New Perspective in River Management, William R. Pearson and Dennis E. Cin, WW76:Aug 76:536
The Green Bay—Fox River System in Transition, Harold John Day, WW76:Aug 76:527
Lower Minnesota River — Capacity Study, Amardo J. Romano, WW76:Aug 76:687
Origins of Federal Waterways Engineering, Leland R. Johnson, WW76:Aug 76:1130
Revival of Inland Navigation in Pakistan, Irshad Ahmad, WW76:Aug 76:84
Today's Northwest Passage, Richard A. Kaden and Roney A. Heinz, CE:June 76:41
Utilization and Control of Rivers in the Southwest, George A. Whetstone, WW76:Aug 76:1149

Inlets (Waterways)
Assessment of Galveston Entrance Movable-Bed Model, William H. McAnnaly, Jr. and Joseph V. Letter, Jr., Preprint No.2661, Apr 76, 27pp.
Characteristics and Behavior of Pacific Coast Tidal Inlets, Joe W. Johnson, WW3:Aug 73:325:9927
Computation of Flow through Masonboro Inlet, N.C., Michael Amein, WW1:Feb 75:93:11124
Improved Fish Protection at Intake Systems, Victor J. Schuler and Lory E. Larson, EE6:Dec 75:897:11756
Increasing the Mean Current in Coastal Channels, Jacobus van de Kreeke, WW2:May 76:223:12157
Influence of Tidal Inlets on Salinity in Estuaries, N. Jothi Shankar, WW4:Nov 75:369:11692
Regime Equations and Tidal Inlets, Curtis Mason, WW3:Aug 73:393:9952
Response of Carolina Beach Inlet to a Deposition Basin Dredged in the Throat, Adrian J. Combe, III and George M. Watts, DIEE:Jan 76:719
Review of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY11:Nov 75:1405:11693
Sand Bypassing with Split-Hull Self-Propelled Barge Currituck, W. H. Sanderson, DIEE:Jan 76:163

Innovation
Address at Ocean Engineering III, Paul Atkinson, OE75:June 75:1476
The Aerospace Industry and the Civil Engineer, W. James King and Donald McDonald, Preprint No.2808, Sept 76, 20pp.
Job-Site Innovations Slash Time, Cost of Constructing Canada's Tallest Skyscraper, Keith E. Roberts, CE:Aug 76:42

Input
Energy Inputs to Irrigation, J. Clair Batty, Safa N. Hamad and Jack Keller, IR4:Dec 75:293:11810

Input-Output Analysis
AISC Code Compliance Provisions of ICES STRUDL-II, Michael G. Samuchin, ST76:Aug 76:756
Computer Input/Output Methods Useful for Engineers, Phoebe A. Miller and Barry A. Scott, ST76:Aug 76:851
General Linear Hydrologic Response Models, Fazal H. Chaudhry, WW76:Aug 76:367
Productivity in Engineering Design, Kenneth F. Reinschmidt, PROD:Aug 76:21

Insecticides
Effects of Temperature and Kelthane on Grass Shrimp, Siamak Khorram and Allen W. Knight, EE5:Oct 76:1043:12475

In Situ Tests
Earth Pressures Measured with Hydraulic Piezometers, A. D.M. Penman, GT75:June 75:II-361
In-Place Evaluation of Concrete, V. Mohan Malhotra, CO2:June 75:345:11354
In Situ Measurement of Initial Stress and Deformation Characteristics, C. Peter Wroth, GT75:June 75:II-181
In Situ Measurement of Soil Properties, Harvey E. Wahls, Chmn., GT75:June 75
In Situ Measurement of Volume Change Characteristics, James K. Mitchell and William S. Gardner, GT75:June 75:II-279
In-Situ Pore Presure Measurements at Rio Blanco, John R. Banister, Robert Pyke, D. Maxwell Ellett and Leon Winters, GT10:Oct 76:1073:12471
In-situ Shear Test for Rock Fills, Surendra P. Jain and Ramesh C. Gupta, GT9:Sept 74:1031:10823
In Situ Soils Measuring Devices, Roney A. Heinz, CE:Oct 75:62
In Situ Soils Measuring Devices — Part II, CE:Dec 75:73
Instrumentation for Wave Induced Pore Pressures, James T. Dette, Vahan Tanal and Joseph A. Fischer, OE75:June 75:355
Measurement of In Situ Strength, John H. Schmertmann, GT75:June 75:II-57
Method for Crosshole Seismic Testing, Robert F. Ballard, Jr., GT12:Dec 76:1261:12646
Models of Geological Materials in Ground Shock, Ivan S. Sandler and Melvin L. Baron, NMG:June 76:I-219
Shoaling Rate Prediction Using a Sedimentation Tank, Craig H. Everts, OE75:June 75:294
Study of Deformation Characteristics and Analyses of Jointed Rock Masses, Ryuichi Iida, Koji Hojo and Kozo Saito, NMG:June 76:I-232
Swelling Rock: A Review, Ernest N. Lindner, GT76:Aug 76:141

Inspection
Alberta's Viewpoint on Risk, John W. Campbell, EFRLD:Sept 75:147
Contractor Quality Control, Joseph C. Dean, Robert I. Carr and Walter L. Meyer, CO3:Sept 76:535:12422
Corps Guidelines for Dam Safety Inspection Need Revamping, Bob J. Buchler, CE:Jan 75:74
Dam Safety — Texas Style, Joe D. Carter, EFRLD:Sept 75:79
Evaluation of Environmental Impact of Landfills, Patrick Caffrey, Martin David and Robert K. Ham, EE1:Feb 75:55:11119
Liability Considerations in State Dam Permit and Inspection Programs (A Look at Ohio's Program), Roy Winkle, EFRLD:Sept 75:113
Maintenance Management Aids, Eugene L. Marvin, Preprint No.2637, Apr 76, 25pp.
National Program of Inspection of Dams — Existing Practices and Capabilities, Charles F. Corns, EFRLD:Sept 75:17
Recommended Standards for the Responsibility, Authority, and Behavior of the Inspector, Joseph Goldbloom, Chmn., CO2:June 75:359:11384

Installation
Development of Analysis Techniques for Deployment, Robert W. Thresher, OE75:June 75:593

Instantaneous Unit Hydrograph
General Linear Hydrologic Response Models, Fazal H. Chaudhry, WW76:Aug 76:367

Institutional Constraints
Water Rights and Water Quality Management, William R. Walker and William E. Cox, HY3:Mar 75:511:11156

Instrumentation
Accelerometer Wave Recording Buoy, W. F. Baird and C. W. Glodowski, OE75:June 75:1104
Automated Hydrography in the Philadelphia District, Henry R. Spies, Preprint No.2764, Sept 76, 14pp.
Coring the Deep Oceans for Science, Robert R. Knapp and Valdemar F. Larson, OE75:June 75:784
Electrical Detection of Waves at Water-Air Surface, B. Vonnegut and R. Markson, OE75:June 75:1137
Feedback from Field Studies of Hydraulic Dredges, David R. Basco, WW3:Aug 75:277:11526
In-Place Evaluation of Concrete, V. Mohan Malhotra, CO2:June 75:345:11354
In Situ Measurement of Initial Stress and Deformation Characteristics, C. Peter Wroth, GT75:June 75:II-181
In Situ Soils Measuring Devices, Roney A. Heinz, CE:Oct 75:62
In Situ Soils Measuring Devices — Part II, CE:Dec 75:73
Instrumentation for Wave Induced Pore Pressures, James T. Dette, Vahan Tanal and Joseph A. Fischer, OE75:June 75:355
Marine Soil Mechanics and Foundations II, State-of-the-Art Summary, Anton L. Inderbitzen, OE75: June 75:486
Mica Dam Embankment Stress Analysis, Nigel A. Skermer, GT3:Mar 75:229:11162
New Instruments for Studying Ocean Pollution, Willard Bascom, Preprint No.2721, Apr 76, 13pp.
Performance of a Cellular Sheetpile Wharf, Warren L. Schroeder, Dennis K. Marker and Thanasarn Khuayjarernpanishk, Preprint No.2731, Apr 76, 28pp.
Recording Rapid Settlement by the Oedometer, David M. McCann, Jon Darwell and Bruce Denness, OE75:June 75:401
Seismic Instrumentation of Dams, Bruce A. Bolt and Donald E. Hudson, GT11:Nov 75:1095:11697
A Stability Study of a Concrete Arch Dam Rock Abutment, Edward C.K. Tom, Nestor T. Mirafuente and Efren Estrella, GT76:Aug 76:264
Wave Climate at Plymouth, Massachusetts, Albert L. Robitaille, OE75:June 75:1152

Insulation
Performance Requirements for Fireproofing Materials, Lawrence G. Seigel, EM3:June 74:489: 10598
Probability of Failure of Building from Fire, Raymond H. Burros, ST9:Sept 75:1947:11567

Insurance
Conference Summary, Joseph J. Ellam, EFRLD:Sept 75:181
Liability of Consultants in Dam Investigations, Gardner M. Reynolds, EFRLD:Sept 75:157
Reducing Construction Accidents—Top Management's Role, Raymond E. Levitt and Henry W. Parker, CO3:Sept 76:465:12384

Intake Structures
Performance of Pennsylvania Highway Drainage Inlets, Arthur W. Brune, Walter H. Graf, Erik Appel and Peter P. Yee, HY12:Dec 75:1519:11801
Recent Techniques in Water Diversion, Fuat Senturk, WW76:Aug 76:1476

Integral Equations
Applications of Integral Equation Method to Some Geomechanical Problems, Yoshiji Niwa, Shoichi Kobayashi and Takuo Fukui, NMG:June 76:I-120
Comparison of Boundary Integral Equation and FE Methods, Shien T. Wang and George E. Blandford, TN: ST9:Sept 76:1941:12370

Integral Transformations
FE Analyses of Rafts on Viscoelastic Foundations, Yang H. Huang, NMG:June 76:I-463
Tornado-Induced Waves in a Basin, Yong Kwun Chung and Herman Bomze, OE75:June 75:96

Interactions
Computer-Aided Design of Urban Transit Systems, Jerry B. Schneider, Claus D. Gehner, Dennis Porter and James Clark, TE4:Nov 74:943:10936
Consideration of Other Techniques, Robert V. Whitman, STN75:Dec 75:II-257
A Numerical Solution for Viscoelastic Half Planes, Gautam Dasgupta, EM4:Aug 76:601:12325
Optimization in Trusses Using Optimal Control Theory, Narasingam M. Singaraj and Jawalker K. Sridhar Rao, ST5:May 75:1037:11304
Seismic SSI of Nuclear Power Plant Structures, Izzat M. Idriss and Khosrow Sadigh, GT7:July 76:663: 12246
Simplified N-Dimensional Interaction Surfaces, Thomas A. Duffey and Howard L. Schreyer, ST7: July 76:1291:12230

Inter-Agency Cooperation
Integrated Grant Administration Program, Roland M. Lewis and Johannes W. Kurz, TE1:Feb 75:155: 11110

Interbasin Water Transfers
Diversion of Water through Northfield Mt. Pumped Storage Project, Charles W. Lockwood, WR1:Apr 76:49:12075
The Le Grande Hydroelectric Development, Gilles Bergevin and Richard N. Seemel, CE:Sept 76:60
Russia Redistributes River Flow, Norman Precoda, CE:Feb 75:72

Interchanges
Use of Space in Highway Impact Zone, Floyd I. Thiel, Roger D. Mingo and Jo Ann Fields, TE4: Nov 76:727:12539

Intergovernmental Relations
Evaluation of a Bedload Sediment Sampler for USA-Canada Watershed Studies, Thomas F. Zimmie, Young S. Paik and Carsten H.L. Floess, IR76:July 76:40

Interior Design
Masjid (Mosque) Designing, Altaf Hussain, UP1:Aug 76:177:12349
Staff Versus Administration Versus Board or the Planning Process Organized for Consensus Instead of Conflict, James Falick, David Burdick and Henry Winkelman, Preprint No.2701, Apr 76, 23pp.

Intermittent Operation
Intermittent Sand Filtration of Household Wastewater, David K. Sauer, William C. Boyle and Richard J. Otis, EE4:Aug 76:789:12295

Internal Friction
Dynamic Shear Moduli for Dry Sands, Mehmet A. Sherif and Isao Ishibashi, GT11:Nov 76:1171:12572
Yielding of Sand in Plane Strain, Sam Frydman, GT5:May 74:491:10540

Internal Pressure
Consolidation with Internal Pressure Generation, John T. Christian, TN: GT10:Oct 76:1111:12445

International Commissions
Analysis of an Irrigation Return Flow Issue, Warren Jamison, John E. Knoll and Thomas J. Crooks, IR76:July 76:532
Environmental Implications of Increased Agricultural Production in International River Basins, Peter J. Reynolds, IR76:July 76:394
Evaluation of a Bedload Sediment Sampler for USA-Canada Watershed Studies, Thomas F. Zimmie, Young S. Paik and Carsten H.L. Floess, IR76:July 76:40

International Aspects of Irrigation and Drainage in the Yuma Area, Wesley E. Steiner, Jr., IR76:July 76:558
Public Participation in Great Lakes Water Levels Regulation: Further Findings from the Public Hearing Held by the I.J.C. in 1973, A. P. Grima and C. Dufournaud, IR76:July 76:418

International Factors
International Aspects of Irrigation and Drainage in the Yuma Area, Wesley E. Steiner, Jr., IR76:July 76:558
OCIMF Marine Terminal Activities, Thomas F. Bell, Preprint No.2654, Apr 76, 25pp.

International Law
International Law and Superport Development, Amos C. Dawson, OE75:June 75:1462
The Oceans and American Policy, Thomas A. Clingan, Jr., OE75:June 75:1490

International Waters
Analysis of an Irrigation Return Flow Issue, Warren Jamison, John E. Knoll and Thomas J. Crooks, IR76:July 76:532
International Aspects of Irrigation and Drainage in the Yuma Area, Wesley E. Steiner, Jr., IR76:July 76:558

Interstate Commissions
Implementation of Interstate Water Quality Plan, Cecil H.J. Hull, HY3:Mar 75:495:11177

Interstate Highway System
Highway in Harmony with Its Environment, Cade L. Benson, CE:Sept 76:56
The Interstate Era of Highway Construction, Wesley S. Mendenhall, Jr., Preprint No.2793, Sept 76, 21pp.
Interstate Highway System, Kneeland A. Godfrey, Jr., CE:Mar 75:51
Interstate Squeezes through River Gorge, CE:June 75:54
I-70 Glenwood Canyon — Design Concept, Joseph H. Looper, TE2:May 76:201:12138

Interstate Transportation
Project Communication and the Washington Metro System, William S. Alldredge, PROD:Aug 76:153

Interurban Transportation Systems
Evaluating Multi-Modal Alternatives: San Diego/Los Angeles Corridor Study, Darwin G. Stuart, Preprint No.2666, Apr 76, 29pp.

Interurban Travel
Entropy Model and Intercity Modal Split in the UK, Gerald R. Leake and John R. Underwood, TE2:May 76:215:12110
Intercity Systems, Jerry D. Ward, Preprint No.2769, Sept 76, 17pp.

Inventories
Computerized Inventory of Traffic Signs, Tapan K. Datta and David M. Litvin, TE4:Nov 75:707:11708
Federal Legislation and Activities for Dam Safety, Homer B. Willis, EFRLD:Sept 75:5
National Program of Inspection of Dams — *NATIONAL DAM INVENTORY*, Samuel H. Miles, EFRLD:Sept 75:23
Recycling Older Buildings Preserves History, Saves Money, Harold H. Franke, CE:Oct 75:55
Responsibility and Liability of Public and Private Interests on Dams, Jerry Phelan, EFRLD:Sept 75:63

Inverted Filters
Inverted Filter Stabilizes Soil, Stops Erosion, Chesley J. Posey, CE:Apr 76:78

Investment
Dynamic Programming Model for Wastewater Plant Investment, John M. Armstrong, EE5:Oct 76:985:12466

Investments
Future of Highways, Fiscal Constraints, Srikanth Rao, Thomas D. Larson and Theodore H. Poister, Preprint No.2768, Sept 76, 24pp.
Optimizing Economic Return on Highway Investment, Robert L. Carstens, TE4:Nov 76:665:12529

Inviscid Flow
Circular Jumps, Subhash C. Mehrotra, HY8:Aug 74:1133:10758

Ion Exchange
Removal of Heavy Metals from Industrial Effluents, Jim V. Rouse, EE5:Oct 76:929:12447

Ireland
Flood Routing Through a Balancing Lake, Elsayed M. Elsawy and Toney Edgeley, WW76:Aug 76:1039

Iron
The Bicentennial of Structural Engineering, Carl Hirsch, ST76:Aug 76:359

Irrigation
Aqueduct Optimization with Intermediate Storage, Jayant Sathaye and Warren A. Hall, IR2:June 76:249:12180
Automated Valves for Surface Irrigation Pipelines, Allan S. Humpherys and Robert L. Stacey, IR2:June 75:95:11380
Design of Drip Irrigation Main Lines, I-pai Wu, IR4:Dec 75:265:11803
Design of Irrigation Runoff Recovery Systems, Glen E. Stringham and Safa N. Hamad, IR3:Sept 75:209:11569
Determining Optimal Well Discharge, Otto J. Helweg, IR3:Sept 75:201:11566
Economic Pipe Sizing for Gravity Sprinkler Systems, Roland P. Perold, IR2:June 74:107:10583
Economic Pipe Sizing in Pumped Irrigation Systems, Roland P. Perold, IR4:Dec 74:425:10988
Economics and Financial Aspects of Canadian Irrigation and Drainage Projects, Harry B. Rosenberg, IR76:July 76:640
Effluent Irrigation of Pearl Millet, Allen R. Overman, EE2:Apr 75:193:11233
Effluent Irrigation of Rye and Ryegrass, Allen R. Overman and Hsiao-Ching Ku, EE2:Apr 76:475:12035
Energy Inputs to Irrigation, J. Clair Batty, Safa N. Hamad and Jack Keller, IR4:Dec 75:293:11810
Environmental Aspects of Aquatic Plant Control, Thomas R. Bartley and Edward O. Gangstad, IR3:Sept 74:231:10810
Estimating Seepage Losses from Canal Systems, Robert V. Worstell, IR1:Mar 76:137:11960
Evaluation of Nonuniformity in Irrigation and Yield, Ivan Varlev, IR1:Mar 76:149:12003
Evaporation Reduction with Reflective Covers, Keith R. Cooley and Lloyd E. Myers, IR3:Sept 73:353:9982
Fate of Nitrogen in Sewage Effluent Applied to Soil, J. Clarence Lance, IR3:Sept 75:131:11570
Fate of Wastewater Bacteria and Viruses in Soil, Charles P. Gerba, Craig Wallis and Joseph L. Melnick, IR3:Sept 75:157:11572
Fate of Wastewater Phosphorus in Soil, Carl G. Enfield and Bert E. Bledsoe, IR3:Sept 75:145:11593
Functions to Predict Optimal Irrigation Programs, J. Ian Stewart, Robert M. Hagan and William O. Pruitt, IR2:June 74:179:10626
Highlights of San Diego Convention, CE:June 76:67
Hydraulic Representation of Flow Cross Sections, Sun-Fu Shih and Robert L. Hamrick, TN: IR1:Mar 76:175:11955
Intercontinental Comparison of Evaporation Estimates, Robert D. Burman, IR1:Mar 76:109:11958
International Aspects of Irrigation and Drainage in the Yuma Area, Wesley E. Steiner, Jr., IR76:July 76:558

Irrigation Development in Bangladesh, Stephen V. Allison and Kazi F. Jalal, IR1:Mar 74:69:10394
Irrigation Management Decisions for Minimizing Nitrate Leaching, A. S. Dylla, D. R. Timmons and Hollis Shull, IR76:July 76:168
Irrigation Management for Salt Control, Jan van Schilfgaarde, Leon Bernstein, James D. Rhoades and Stephen L. Rawlins, IR3:Sept 74:321:10822
Irrigation Research to Practice in Grand Valley, Gaylord V. Skogerboe, Wynn R. Walker and Robert G. Evans, IR76:July 76:19
Irrigation Return Flow Modeling for the Souris Loop, Richard W. Ribbens and Marvin J. Shaffer, IR76: July 76:545
Irrigation Return Flow Water Quality Analysis, Okay Cyril Igwe and T. L. Coulthard, IR76:July 76:519
Irrigation Tailwater Loss and Utilization Equations, Arland D. Schneider, TN: IR4:Dec 76:461:12592
Irrigation Timetable Combined with Optimal Operating of an Agricultural Production System, Ilan Amir, Y. Friedman, S. Sharon and A. Ben David, IR76:July 76:192
Operation and Maintenance of Irrigation and Drainage Systems: Section IV — Maintenance, Richard A. Smith, Chmn., IR1:Mar 76:1:11963
Optimization of Design Capacity of an Aqueduct, Jayant Sathaye and Warren A. Hall, IR3:Sept 76: 295:12396
Optimum Pipe Sizing in a Branching Irrigation System, T. Al Austin, Preprint No.2679, Apr 76, 14pp.
Persistence of Virus on Sewage-Irrigated Vegetables, Edward P. Larkin, John T. Tierney and Robert Sullivan, EE1:Feb 76:29:11935
A Potential Irrigation-Conservation Program for 300,000 Acres in Northern Maine, Robert G. Hunt, Preprint No.2762, Sept 76, 23pp.
Problem of Irrigation Return Flows, Sheldon G. Boone, IR76:July 76:673
Project Formulation in Today's World — Some Rural Development Dimensions, Graham F. Donaldson, IR76:July 76:700
Protection and Enhancement of Fisheries and Wildlife Resources, F. Eugene Hester, IR76:July 76:690
Reclamation and Western Development, Donald J. Duck, WW76:Aug 76:1114
River Response to Development, Everett V. Richardson and Daryl B. Simons, WW76:Aug 76: 1285
Seepage from Trapezoidal Canal in Anisotropic Soil, Annapareddy S. Reddy and Udayaditya Basu, IR3: Sept 76:349:12386
Simulation Model for Evapotranspiration of Wheat: Empirical Approach, Daniel Shimshi, Dan Yaron, Eshel Bresler, Mordechai Weisbrod and Gad Strateener, IR1:Mar 75:1:11170
Simulation Model for Evapotranspiration of Wheat: Effect of Evaporative Conditions, Gad Strateener, Dan Yaron, Eshel Bresler and Daniel Shimshi, IR1: Mar 75:13:11169
Solutions to Green-Ampt Infiltration Equation, Ruh-Ming Li, Michael A. Stevens and Daryl B. Simons, IR2:June 76:239:12196
South Platte River Flow Correlations, Robert E. Glover, IR3:Sept 75:175:11563
Theory and Practice of Public Participation in Planning, Gene E. Willeke, IR1:Mar 74:75:10391
Using Evapotranspiration Data to Favorably Influence an Irrigated Environment, E. H. Hobbs and K. K. Krogman, IR76:July 76:184
Water for the Valley of the Sun, William W. Reedy, Preprint No.2782, Sept 76, 27pp.
Water Management Through Irrigation and Drainage: Progress, Problems, and Opportunities, Jan van Schilfgaarde, Chmn., IR2:June 74:153:10619
Water Movement in Soil from Trickle Source, Ahmed Y. Hachum, Jose F. Alfaro and Lyman S. Willardson, IR2:June 76:179:12204
Water Recreation and Benefit Estimation for Lake Livingston (Texas), Charles W. Warner, Jr., Pat B. Fowler, G. E. Munger, Jr. and Jerry R. Rogers, Preprint No.2682, Apr 76, 16pp.
Weather Modification for Use in High Plains, Richard A. Schleusener and J. R. Miller, Jr., IR3: Sept 74:339:10816
Wet-Wells Volumes for Multipump Systems, Gunther Goldschmidt, IR3:Sept 74:371:10830
Wind, Sprinkler Patterns, and System Design, Ido Seginer and Mordekhai Kostrinsky, IR4:Dec 75: 251:11752
2020 Hindsight; Another Fifty Years of Irrigation?, Daniel A. Dreyfus, IR2:June 75:87:11363

Irrigation Design

Design of Drip Irrigation Main Lines, I-pai Wu, IR4: Dec 75:265:11803
Optimum Pipe Sizing in a Branching Irrigation System, T. Al Austin, Preprint No.2679, Apr 76, 14pp.

Irrigation Ditches

Deterioration of Concrete Ditch Liners in Saline-Alkali Soil, Luther B. Grass and Paul Koluvek, IR4: Dec 74:477:10997

Irrigation Efficiency

Salinity Control and Federal Water Quality Act, Michael B. Bessler and John T. Maletic, HY5:May 75:581:11321

Irrigation Pipes

Design of Drip Irrigation Main Lines, I-pai Wu, IR4: Dec 75:265:11803

Irrigation Systems

Analysis of an Irrigation Return Flow Issue, Warren Jamison, John E. Knoll and Thomas J. Crooks, IR76:July 76:532
Design of Drip Irrigation Main Lines, I-pai Wu, IR4: Dec 75:265:11803
Effects of Irrigation Scheduling and Coordinated Delivery on Irrigation and Drainage Systems, Roy D. Gear, Arnold S. Dransfield and Melvin D. Campbell, Preprint No.2720, Apr 76, 18pp.
Energy Inputs to Irrigation, J. Clair Batty, Safa N. Hamad and Jack Keller, IR4:Dec 75:293:11810
Irrigation Tailwater Loss and Utilization Equations, Arland D. Schneider, TN: IR4:Dec 76:461:12592
Operation and Maintenance of Irrigation and Drainage Systems: Section IV — Maintenance, Richard A. Smith, Chmn., IR1:Mar 76:1:11963
Physical Model Study of Border-Strip Irrigation, Graham A. Jobling and A. Keith Turner, IR4:Dec 73:493:10195
Sprinkler Uniformity Effects on Quality of Return Flow, Ronald D. Bliesner and Lyman S. Willardson, IR76:July 76:508
Using Evapotranspiration Data to Favorably Influence an Irrigated Environment, E. H. Hobbs and K. K. Krogman, IR76:July 76:184
Wastewater Recycling: Coupling Aquatic and Land Irrigation Systems, Darrell L. King and Thomas G. Bahr, IR76:July 76:128
Water Management in Indus River System, Riaz Nazir Tarar, WW76:Aug 76:813

Irrigation Water

Quality of Irrigation Water and Surface Drainage, Johannes C. Guitjens, W. W. Miller and C. N. Mahannah, IR76:July 76:117

Islands

Candidate Industries and General Island Locations, Daniel M. Bragg, OE75:June 75:751
Flood Control for an Island Sited Nuclear Plant, Joel L. Caves, WW76:Aug 76:872
Ocean Engineering in the Design of Sea Islands, Michael J. McCarthy, Edward J. Schmeltz and Joseph Bonasia, OE75:June 75:762
Oscillations in Harbors Containing Islands, Jiin-Jen Lee, OE75:June 75:632

Iteration

FE Analyses of Rafts on Viscoelastic Foundations, Yang H. Huang, NMG:June 76:1-463

Iterative Design for Optimal Geometry, William R. Spillers, ST7:July 75:1435:11439
Iterative Schemes for Slope Stability Analysis, Antonio Soriano, NMG:June 76:II-713

James Laurie Prize
1976 James Laurie Prize Presented to John P. Veerling, CE:Oct 76:103

Japan
Loadings and Codes for Typhoon Resistant Design, Hatsuo Ishizaki, ST10:Oct 76:2073:12496
A Numerical Model for Liquefaction, Chyr Pyng Liou, Victor L. Streeter and Frank E. Richart, Jr., Preprint No.2752, Sept 76, 30pp.
Recent Japanese Developments in Mixed Structures, Minoru Wakabayashi, ST76:Aug 76:497
World's Third Longest Cantilever Bridge, Ichiro Konishi, CE:Feb 76:84

J.C. Stevens Award
1976 J.C. Stevens Award Presented to Danny L. Fread, CE:Oct 76:104

Jet Diffusion
Analysis and Interpretation of a Heated Jet, H. H. Carter, Donald W. Pritchard and S. R. Rives, OE75:June 75:1420
Cooled Seawater Discharge in Harbor Environment, Yuan Jen and Richard B. Dornhelm, OE75:June 75:1362

Jet Flow
Submerged Buoyant Jets in Quiscent Fluids, Daniel T.L. Chan and John F. Kennedy, HY6:June 75:733:11383
Wall Jet Analogy to Hydraulic Jump, Rangaswami Narayanan, HY3:Mar 75:347:11172

Jet Mixing Flow
Hydraulics of Surface Buoyant Jet, Frank Engelund, HY9:Sept 76:1315:12409
Interaction of Multiple Jets with Ambient Current, Ralph R. Boericke, HY4:Apr 75:357:11247

Jets
Cavitation Control by Aeration of High-Velocity Jets, Glenn L. Beichley and Danny L. King, HY7:July 75:829:11462
Entrainment and Drag Forces of Deflected Jets, Daniel T.-L. Chan, Jung-Tai Lin and John F. Kennedy, HY5:May 76:615:12141
Flow Visualization in Free Shear Layers, Joseph A. Clark and Eric Markland, HY11:Nov 73:1897:10119
Gross Parameter Solutions of Jets and Plumes, Klas Cederwall, HY5:May 75:489:11285
Impinging Circular Turbulent Jets, Spyridon Beltaos and Nallamuthu Rajaratnam, HY10:Oct 74:1313:10852
Jet-Forced Circulations in Water-Supply Reservoirs, Rodney J. Sobey and Stuart B. Savage, HY12:Dec 74:1809:11026
Oblique Impingement of Plane Turbulent Jets, Spyridon Beltaos, HY9:Sept 76:1177:12388
Turbulent Jets with Reversible Buoyancy, Subhash C. Jain and Jose M. Pena, HY9:Sept 75:1221:11586

Jetties
Channel Entrance Response to Jetty Construction, J. M. Kieslich and Curtis Mason, OE75:June 75:689
Dynamic Behavior of Box-Girder Jetties, Trevor J. Poskitt, WW2:May 75:181:11310
Oregon Coast Shoreline Changes Due to Jetties, Paul D. Komar, Jose Roman Lizarraga-Arciniega and Thomas A. Terich, WW1:Feb 76:13:11933
Parameters Affecting Stability of Rubble Mounds, Per Moller Bruun and Palmi Johannesson, WW2:May 76:141:12136

J. James Croes Medal
Limestone Barriers to Neutralize Acidic Streams, Frank H. Pearson and Archie J. McDonnell, EE3:June 75:425:11382
1976 J. James R. Croes Medal Presented to Frank H. Pearson and Archie J. McDonnell, CE:Oct 76:102

Job Analysis
Unemployment, Public Works, and the 1976 Presidential Election Campaign, Kneeland A. Godfrey, Jr., CE:Oct 76:82

Job Satisfaction
Improving Productivity in Industrial Construction, John D. Borcherding, CO4:Dec 76:599:12595
Job Dissatisfactions in Construction Work, John D. Borcherding and Clarkson H. Oglesby, CO2:May 75:415:11390

Joint Operations
Unique Team Effort on Washington Subway Project, Delon Hampton and David Novick, EI1:Jan 76:129:11872

Joints
Field Problems of Latticed Structures, Lev Zetlin, Joseph F. Thelen and Daniel A. Cuoco, ST11:Nov 75:2241:11711
Reinforced Concrete Corners and Joints Subjected to Bending Moment, Ingvar H.E. Nilsson and Anders Losberg, ST6:June 76:1229:12222
Shear Behavior of Steel Frame Joints, Helmut Krawinkler, Vitelmo V. Bertero and Egor P. Popov, ST11:Nov 75:2317:11717

Joints (Connections)
Cavitation from Surface Irregularities in High Velocity, James W. Ball, HY9:Sept 76:1283:12435
Fifty Years of Riveted, Bolted, and Welded Steel Construction, William E. Munse, CO3:Sept 76:437:12399
High-Strength Bolted Connections Subject to Prying, Henning Agerskov, ST1:Jan 76:161:11840
A History of Joints in Concrete Pavements, John P. Cook, CO1:Mar 75:29:11201
Strength of Slab-Column Connections with Shear and Unbalanced Flexure, Robert Park and Shafiqul Islam, ST9:Sept 76:1879:12419
Tests on Slab-Column Connections with Shear and Unbalanced Flexure, Shafiqul Islam and Robert Park, ST3:Mar 76:549:11972
Warping and Distortion at I-Section Joints, Porpan Vacharajittiphan and Nicholas S. Trahair, ST3:Mar 74:547:10390

Joints (Geology)
Analysis of Behavior of Edward Hyatt Power Plant, Fred H. Kulhawy and Richard F. Flanagan, GT3:Mar 75:243:11161
Computerized Analysis of Rock Slope Stability, David S. Campbell, John T. Christian and Herbert H. Einstein, GT76:Aug 76:415
Study of Deformation Characteristics and Analyses of Jointed Rock Masses, Ryuichi Iida, Koji Hojo and Kozo Saito, NMG:June 76:I-232
Volume Changes in Models of Jointed Rock, Edwin T. Brown, TN: GT3:Mar 76:273:11953
3-D Stability Analysis of Tunnels in Jointed Rock, Walter Wittke and Bernd Pierau, NMG:June 76:III-1401

Joints (Junctions)
High Strength Bolts Subject to Tension and Prying, R. Shankaran Nair, Peter C. Birkemoe and William H. Munse, ST2:Feb 74:351:10373

Joists
A Brief History of the Steel Joist Industry, Robert C. Macomber, Preprint No.2758, Sept 76, 12pp.
Deflection and Ponding of Steel Joists, R. Richard Avent, ST7:July 76:1399:12241

Judgment
Judgment in Dam Design, William A. Wahler, EFRLD:Sept 75:167

Judicial Decisions
Water Rights and Water Quality Management, William R. Walker and William E. Cox, HY3:Mar 75:511:11156

Julian Hinds Award
1976 Julian Hinds Award Presented to Harvey O. Banks, CE:Oct 76:103

Jurisdiction
Judgment in Dam Design, William A. Wahler, EFRLD:Sept 75:167

Kansas
Kansas Solution to Unionism of Professionals, Bruce F. McCollum, EI3:July 76:283:12253

Kaolin
Anisotropy in Heavily Overconsolidated Kaolin, Srinath F. Amerasinghe and Richard H.G. Parry, GT12:Dec 75:1277:11808

Kaolinite
Shearing Strength of Kaolinite, Illite, and Montmorillonite, Roy E. Olson, GT11:Nov 74: 1215:10947

Karl Emil Hilgard Hydraulic Prize
1976 Karl Emil Hilgard Hydraulic Prize Presented to the Task Committee for Preparation of the Manual on Sedimentation, CE:Oct 76:103

Kentucky
Estimation of Lateral Inflow Hydrographs, Maria Mimikou and Ramachandra A. Rao, WW76:Aug 76:399
High-Accident Spot-Improvement Program, Kenneth R. Agent, John A. Deacon and Robert C. Deen, TE2:May 76:427:12123

Kinematics
Consideration of Other Techniques, Robert V. Whitman, STN75:Dec 75:II-257
On Kinematic Wave Approximation for Flood Routing, Ruh-Ming Li, Daryl B. Simons, Larry S. Shiao and Yung H. Chen, WW76:Aug 76:377

Kinetic Energy
Population Balance Use in Dilute Impurity Problems, John D. Stevens and Paul M. Schierholz, EE2:Apr 76:337:12034

Kinetics
Biomass Distribution and Kinetics of Baffled Lagoons, James H. Reynolds, Stephen B. Nielson and E. Joe Middlebrooks, EE6:Dec 75:1005:11787

Laboratories
John R. Freeman and His Influence on Hydraulics, John B. Drisko, Preprint No.2767, Sept 76, 10pp.

Laboratory Inspection
Laboratory Evaluation of Polymeric Flocculants, Andrew Benedek and John J. Bancsi, EE1:Feb 76: 17:11887

Laboratory Tests
Anisotropy for Finite Element Analysis, Ravikumar Bhaskaran, NMG:June 76:I-345
Bearing Capacity Tests on Reinforced Earth Slabs, Jean Binquet and Kenneth L. Lee, GT12:Dec 75: 1241:11792
Equivalent Uniform Cycle Concept for Soil Dynamics, Mokhtar Annaki and Kenneth L. Lee, Preprint No.2752, Sept 76, 28pp.
Finite Element Analysis of Miyama Rockfill Dam, Tadatsugu Tanaka and Ryoki Nakano, NMG:June 76:II-650
Laboratory Experiments with Surface Runoff, Ivan Muzik, HY4:Apr 74:501:10463
Laboratory Standard Penetration Tests on Fine Sands, William F. Marcuson, III and Wayne A. Bieganousky, Preprint No.2752, Sept 76, 30pp.
Laboratory Study of the Turbidity Generation Potential of Clay Mixtures, David R. Cogley, Barry A. Wechsler and Ralph D'Agostino, DIEE:Jan 76: 964
Measuring Water Velocity by Ultrasonic Flowmeter, Jack C. Schuster, HY12:Dec 75:1503:11806
Non-Breaking and Breaking Wave Forces on Pipelines, Robert A. Grace and Joseph Castiel, OE75:June 75:523
Pullout Resistance of Horizontal Anchors, Braja M. Das and Gerald R. Seeley, OE75:June 75:434
Stilling Basin Design for Low Froude Number, Nani G. Bhowmik, HY7:July 75:901:11448
Studies on Anchored Flexible Walls in Sand, Thomas H. Hanna and Ibrahim I. Kurdi, GT10:Oct 74:1107: 10854
Vane Shear Strengths at Two High Rotation Rates, Alexander D. Smith and Adrian F. Richards, OE75:June 75:421
Vibratory In Situ and Laboratory Soil Moduli Compared, Robert W. Cunny and Zelma B. Fry, SM12:Dec 73:1055:10219

Labor Costs
Estimation and Control of Construction Labor Costs, Boyd C. Paulson, Jr., CO3:Sept 75:623:11579

Labor Unions
Comparision of Construction Labor Agreements, Neal B.H. Benjamin and Arthur W. Young, CO1: Mar 75:183:11180

Lagoons (Ponds)
Some Features of Wind Action on Shallow Lakes, Robert B. Banks, EE5:Oct 75:813:11640

Lagrangian Functions
Coupled Shear Wall Analysis by Lagrange Multipliers, Riadh S. Al-Mahaidi and Arthur H. Nilson, ST11:Nov 75:2359:11732

Lake Ontario
Remote Sensing of Turbidity Plumes in Lake Ontario, Edward J. Pluhowski, TE3:Aug 76:475: 12306

Lakes
Challenge of Michaelis-Menton Constants, Brian W. Mar, TN: EE5:Oct 76:1114:12442
Computer Modeling of Erodible Flood Channels and Deltas, Howard H. Chang and Joseph C. Hill, HY10:Oct 76:1461:12485
Distributions of BOD and DO in Rivers and Lakes, Robert B. Banks, EE2:Apr 76:265:12028
Economic Value of Dredged Material, Wyndham J. Roberts, DIEE:Jan 76:919
Effect of Wind Stress on Stratified Deep Lake, Niels-Erik Ottesen Hansen, HY8:Aug 75:1037:11484
A Numerical Model of the Time-Dependent, Three-Dimensional Structure of Circulation in Large Lakes, Ralph Ta-shun Cheng, Preprint No.2692, Apr 76, 27pp.
Oxygen Depletion Model for Cayuga Lake, J. Denis Newbold and James A. Liggett, EE1:Feb 74:41: 10346
Phosphate Release and Sorption by Lake Mohegan Sediments, John Fillos and Hiranmay Biswas, EE2: Apr 76:239:12029
Presenting Trends in Lake Eutrophication, Stanley Hershman and Samuel O. Russell, TN: EE6:Dec 76:1281:12638
Pressure Effects on Great Lakes Vertical Control, Frank H. Quinn, SU1:Dec 76:31:12605
Some Features of Wind Action on Shallow Lakes, Robert B. Banks, EE5:Oct 75:813:11640
Statistical Design Basis for Submerged Diffuser, Thomas E. Pease and Michael J. Skelly, PO1:July 75:11:11408
Temperature Dynamics in Dimictic Lakes, Heinz Stefan and Dennis E. Ford, HY1:Jan 75:97:11058
Transient Hydrothermal Analysis of Small Lakes, Lawrence A. Loziuk, James C. Anderson and Ted B. Belytschko, PO2:Nov 73:349:10150

Unsteady Stratified Circulation in a Cavity, Der-Liang Young, James A. Liggett and Richard H. Gallagher, EM6:Dec 76:1009:12643
Wind Control of Algae Growth in Eutrophic Lakes, Heinz Stefan, Timothy Skoglund and Robert O. Megard, EE6:Dec 76:1201:12619

Laminar Flow
Shallow Laminar Flows over Rough Granular Surfaces, Harry O. Phelps, HY3:Mar 75:367:11166

Laminated Wood
Analysis and Design of Griplam Nailed Connections, Ricardo O. Foschi and Jack Longworth, ST12:Dec 75:2537:11766
Full-Scale Tests on Tapered and Curved Glulam Beams, Vijaya K.A. Gopu and James R. Goodman, ST12:Dec 75:2609:11794
Laminated Timber Logging Bridges in British Columbia, Richard G. Scarisbrick, ST1:Jan 76:19:11832
Pipeline Bridge Uses Timber Arches, Charles Gary Peterson, CE:Feb 75:58
Tension Proof Loading for Southern Pine Beams, M. Dee Strickler and Roy F. Pellerin, ST3:Mar 76:645:11978
University of Idaho Barrel-Arch Roof Wins Outstanding Structural Engineering Award, CE: June 76:48
The University of Idaho Stadium: A Micro-Lam Application, Sherman A. Nelson, Preprint No.2800, Sept 76, 19pp.

Laminates
Nonlinear Analysis of Unsymmetrically Laminated Plates, Samir A. Zaghloul and John B. Kennedy, EM3:June 75:169:11345

Land Appraisal
Impact of Flooding on Land Transfer Prices, Wayne E. Boyet, Kenneth W. Hollman and Wayne L. Sterling, WW76:Aug 76:127

Land Fill
Candidate Industries and General Island Locations, Daniel M. Bragg, OE75:June 75:751

Landfills
Challenges in Disposal of Dredged Material, B. C. Godwin, Preprint No.2648, Apr 76, 13pp.
County Treats Shredfill Leachate, Otto Vydra and Alfred Grimm, CE:Dec 76:55
Dredged Material as a Natural Resource, Michael R. Walsh, Preprint No.2714, Apr 76, 19pp.
Embankment Loading of Hydraulic Fill, Timothy K. Dahlstrand, Preprint No.2649, Apr 76, 14pp.
Landfill Disposal of Liquid Sewage Sludge, Ralph Stone, EE1:Feb 75:91:11112
Some Geotechnical Aspects of Marginal Wharf Design, William Enkeboll and Vernon A. Smoots, Preprint No.2699, Apr 76, 24pp.
Stabilization of Polluted Dredgings by Electro-Osmosis, Raymond J. Krizek, Francis B. Gularte and Paul L. Hummel, Preprint No.2641, Apr 76, 30pp.
Time-Dependent Development of Strength in Dredgings, Raymond J. Krizek and Abdelsalam M. Salem, Preprint No.2640, Apr 76, 28pp.

Landing Forces
Response of Flexible Pavements to Multiple Loads, Yu Tang Chou, Ronald L. Hutchinson and Harry H. Ulery, Jr., TE2:May 75:247:11307

Landing Gear
Airport Upgrading Versus Landing Gear Optimization, Fletcher H. Griffis and M. A. Gammon, TE2:May 76:313:12137
Structural Analysis of Flexible Airfield Pavements, Richard G. Ahlvin, Yu Tang Chou and Ronald L. Hutchinson, TE3:Aug 74:625:10727

Land Management
Maintaining Water Quality in Voyageurs National Park, William H. Anderl, Preprint No.2686, Apr 76, 14pp.

Land Reclamation
Bayesian Approach to Tile Drain Design, Andre Musy and Lucien Duckstein, IR3:Sept 76:317:12390
Hydraulic Dredge Spoil for Land Reclamation, Carl W. Garbe and Kuei-wu Tsai, Preprint No.2678, Apr 76, 24pp.
Let's Consider Land Treatment, Not Land Disposal, Ants Uiga, Alfred T. Wallace and David H. Howells, CE:Mar 76:60
Mechanical Dredges, Adolph W. Mohr, DIEE:Jan 76:125
San Diego Harbor — Past and Present, Charles H. Fisher, Preprint No.2783, Sept 76, 4pp.
Water for the Valley of the Sun, William W. Reedy, Preprint No.2782, Sept 76, 27pp.

Land Resources
Food and Agricultural Policies, Earl O. Heady, Preprint No.2754, Sept 76, 16pp.

Landscaping
Highway in Harmony with Its Environment, Cade L. Benson, CE:Sept 76:56

Landslides
Computation of Seismic Induced Flow Landslide, Hung Tao Shen and Wen Huang, NMG:June 76:II-1054
Construction Redesign — Woodstock Rockslide, N.H., Brian K. Fowler, GT76:Aug 76:386
Consultants Reviewing Plans of Other Consultants in Fairfax County, Va.; Landslides Greatly Reduced, Eugene E. Dallaire and C. S. Coleman, CE:Sept 76:77
Dynamic Analysis of the Slide in the Lower San Fernando Dam during the Earthquake of February 9, 1971, H. Bolton Seed, Izzat M. Idriss, Kenneth L. Lee and Faiz I. Makdisi, GT9:Sept 75:889:11541
Initial Stresses in Natural Slope Analysis, Robin N. Chowdhury, GT76:Aug 76:404
Landslide Generated Water Wave Model, Donald C. Raney and H. Lee Butler, HY9:Sept 76:1269:12425
Landslide Hazard Mapping on a Shoestring, Clarence B. Drennon and William G. Schleining, SU1:Oct 75:107:11655
Liquefaction during 1906 San Francisco Earthquake, T. Leslie Youd and Seena N. Hoose, GT5:May 76:425:12143
The Slides in the San Fernando Dams During the Earthquake of February 9, 1971, H. Bolton Seed, Kenneth L. Lee, Izzat M. Idriss and Faiz I. Makdisi, GT7:July 75:651:11449
States Intensifying Efforts to Reduce Highway Landslides, Ronald G. Chassie and Roger D. Goughnor, CE:Apr 76:65
Tackling Major Highway Landslides in the Tennessee Mountains, David L. Royster, CE:Sept 75:85

Land Surveys
Horizontal Control in Kansas City by State Plane Coordinates, Don D. Hurlbert and J. Douglas McDonald, SU1:Dec 76:9:12598

Land Usage
Candidate Industries and General Island Locations, Daniel M. Bragg, OE75:June 75:751
Developing Alternative Futures, John M. Courtney, UP1:Aug 76:49:12337
Effect of Energy Shortage and Land Use on Auto Occupancy, Jahanbakhsh Behnam and Robert E. Beglinger, TE2:May 76:255:12142
Evaluating Economic and Energy Consequences of Land-Use Decisions, Robert S. DeVoy, UP1:Aug 76:105:12331
Land Use and Flood Management, Kenneth R. Wright and Ruth M. Wright, WW76:Aug 76:147

Let's Consider Land Treatment, Not Land Disposal, Ants Uiga, Alfred T. Wallace and David H. Howells, CE:Mar 76:60
The Nuclear Energy Center Impact on Land Use, Frank A. Jenkins, EFEEC:Aug 75:73
Session II — Land Use, Charles A. Dewey, Jr., EFEEC:Aug 75:408
Some Factors Affecting Land Use for Energy Centers, Harry A. Kornberg, EFEEC:Aug 75:48
Utility Land Corridors Location Model — Environmental Assessment, Thomas E. Wester and Dennis W. Weeter, Preprint No.2653, Apr 76, 29pp.
Water—An Element of Land-Use and Urban Growth Policies, William R. Walker and William E. Cox, UP1:Aug 76:81:12339

Land Usage Regulations

Land Use and Flood Management, Kenneth R. Wright and Ruth M. Wright, WW76:Aug 76:147

Land Use

Agricultural Benefit Assessment from Flood Control, Krishan P. Singh, IR76:July 76:264
Air Quality Management through Land-Use Measures, Ronald A. Venezia, UP1:Aug 76:95:12350
Analysis of Urban Transportation Criteria, Thabet Zakaria, TE3:Aug 75:521:11496
Building Construction Management Game, Kenneth F. Reinschmidt, James W. Litchfield and Steven D. Hunt, EI2:Apr 75:117:11248
Candidate Industries and General Island Locations, Daniel M. Bragg, OE75:June 75:751
Changes in Socioeconomic Considerations, Walter E. Lewis, UP1:Aug 76:29:12355
The Changing Scene, Harold E. Nelson, UP1:Aug 76:3:12307
Chicago Urban Transportation Planning, Harold E. Nelson and William L. Barnes, Preprint No.2815, Sept 76, 27pp.
Concepts in the Control of Nonpoint Water Pollution, M. H. Frere, David A. Woolhiser, J. H. Caro, B. A. Stewart and W. H. Wischmeier, Preprint No.2667, Apr 76, 24pp.
County Planning for Suburban Growth Management, Arnold A. Goldstein, Preprint No.2817, Sept 76, 17pp.
Countywide Land Use Forecasts, Robert E. Heightchew, Jr., UP2:Nov 75:135:11682
Developing Alternative Futures, John M. Courtney, UP1:Aug 76:49:12337
Dredged Material as a Natural Resource, Michael R. Walsh, Preprint No.2714, Apr 76, 19pp.
Economic Analysis of Residential Land-Use Alternatives, David C. Curtis and Richard H. McCuen, UP2:Nov 75:109:11678
Effects of Man on Low Flows, Henry C. Riggs, IR76:July 76:306
Engineering Geologic Data for Land-Use Planning, John D. Rockaway, UP2:Nov 75:117:11681
Environment — 25 Years Ahead, Ira L. Whitman, CE:Jan 76:52
Estimation of Washload Produced on Certain Small Watersheds, Oswald Rendon-Herrero, HY7:July 74:835:10638
Evaluating Economic and Energy Consequences of Land-Use Decisions, Robert S. DeVoy, UP1:Aug 76:105:12331
An Event-Based Formulation of Watershed Management, Martin M. Fogel, Lucien Duckstein and Andre Musy, IR76:July 76:349
Fate of Wastewater Phosphorus in Soil, Carl G. Enfield and Bert E. Bledsoe, IR3:Sept 75:145:11593
Five Decades of Progress in Pipelining, David R. Williams, Jr., CO4:Dec 75:751:11770
Flood Damage Reduction Potential of River Forecast, Harold John Day and Kwang K. Lee, WR1:Apr 76:77:12059
Genesee Expressway Corridor Analysis, Lawrence H. Lehman, Robert J. Trapani and Philip A. Habib, TE4:Nov 75:781:11726
Ground-Water's Role in Water Quality Management, John O. Osgood, HY3:Mar 75:517:11159
Hydrogeology and Water Quality Management, Ronald A. Landon, HY2:Feb 75:285:11137
Identifying Urban Flash Flooding Problems, William P. Darby and Mitchell J. Small, WR2:Nov 76:349:12571
Integrated Evaluation Programs, Irving Hand, UP1:Aug 76:117:12334
Integrated Evaluation Programs for Fairfax County, Va., Jim Reid, UP1:Aug 76:137:12332
Intergovernmental Guidance of Land Use and Growth, Bruce D. McDowell, UP1:Aug 76:15:12319
An Issue-Based Land-Use Planning Process, Stephen C. Lockwood, UP1:Aug 76:41:12341
Kingwood: A Non-Assisted Private Suburban Development, Daniel B. Stauffer, Preprint No.2656, Apr 76, 26pp.
Land-Based Modeling System for Water Quality Management Studies, Walter M. Grayman, Richard M. Males, William E. Gates and A. W. Hadder, HY5:May 75:567:11327
Landslide Hazard Mapping on a Shoestring, Clarence B. Drennon and William G. Schleining, SU1:Oct 75:107:11655
Land Use and Flood Management, Kenneth R. Wright and Ruth M. Wright, WW76:Aug 76:147
Land-Use and Growth Management—A Comment for Professionals, Randall Scott, UP1:Aug 76:73:12359
Land Use and Water Quality in New York Rivers, Douglas A. Haith, EE1:Feb 76:1:11902
Land-Use Model for Service Area Projection, Peter M. Meier, EE1:Feb 76:71:11932
Legal Perspective on Water Quality Management, Douglas R. Blazey, HY5:May 75:595:11320
Local Land Use Control Over Critical Areas, Charles Thurow, CE:Sept 75:73
Local Land Use Workshops Help, Murray I. Mantell, CE:Oct 75:88
Maintaining Water Quality in Voyageurs National Park, William H. Anderl, Preprint No.2686, Apr 76, 14pp.
Management Model for Wastewater Disposal on Land, A. Koenig and Daniel P. Loucks, IR76:July 76:321
Management of Connecticut River Flood Problems, S. Lawrence Dingman, WW76:Aug 76:832
Measuring Watershed Land-Use Changes with Airphotos, Donald B. Stafford, James T. Ligon and M. Eugene Nettles, TE1:Feb 76:117:11925
National Land-Use Policy: Is it Needed?, Daniel A. Dreyfus, UP1:Aug 76:9:12324
Nebraska Flood-Plain Management Program—Part I, Albert E. Mathews, HY7:July 75:977:11437
Nebraska Flood-Plain Management Program—Part II, James R. Cook, HY7:July 75:983:11438
New Institutions for Joint Development, Rodney E. Engelen, UP1:May 75:11:11288
Noise in the Urban Environment, Felipe U. Derteano, UP2:Nov 75:183:11688
Nonpoint Sources of Pollution: A Federal Perspective, Mark A. Pisano, EE3:June 76:555:12211
Nonstructural Flood Control — A Case Study, Rex A. Burns and David H. Pilgrim, WW76:Aug 76:552
The Nuclear Energy Center Impact on Land Use, Frank A. Jenkins, EFEEC:Aug 75:73
Optimizing Selection of Marine Retaining Walls, Robert C. Johnston, Max Bernheimer and Dominic A. Zarrella, GT12:Dec 76:1209:12624
Optimizing the Selection of Marine Retaining Walls, Robert C. Johnston, Max Bernheimer and Dominic A. Zarrella, Preprint No.2710, Apr 76, 28pp.
Pedestrian Versus Bicycle Versus Automobile — A Case Study, John M. Wright, BP75:Dec 75:172
Phosphorus Model of Muskegon Wastewater System, Carl G. Enfield and Lowell E. Leach, EE6:Dec 75:911:11775
Planning and Implementation under Section 208, William C. Lienesch and Gerald A. Emison, WR2:Nov 76:283:12556
Planning Criteria for Bikeways, Vincent R. Desimone, TE3:Aug 73:609:9928

Proposed Standards: Land Disposal of Effluents, John V. Betz, CE:May 75:77
Quarantine Island Disposal Plan, George Marsch, DIEE:Jan 76:579
Recent Legislation Impacting on Dredging Projects, William L. Black, Preprint No.2727, Apr 76, 23pp.
Response of the Mississippi River to the Cutoffs, Brien R. Winkley, WW76:Aug 76:1267
The Resurgence of Light Rail Transit, Martin Lenow, TE2:May 76:229:12131
The Role of Geotechnical Engineering in Land Use Planning, Ronald C. Hirschfeld, EFEEC:Aug 75:65
Round Table Discussion on Future Conferences, Walter H. Kraft, BP75:Dec 75:585
Session II — Land Use, Charles A. Dewey, Jr., EFEEC:Aug 75:408
Social Evaluation of Land-Use Controls, Morton Lustig, UP1:Aug 76:111:12356
Some Factors Affecting Land Use for Energy Centers, Harry A. Kornberg, EFEEC:Aug 75:48
Spatial Data Analysis of Nonstructural Measures, R. P. Webb and M. W. Burnham, WW76:Aug 76:329
Stormwater Studies and Alternatives in Atlanta, Robert F. Holbrook, Armando I. Perez, Billy G. Turner and Herbert I. Miller, EE6:Dec 76:1263:12614
Summary of Land-Use Policy Papers, Charles B. Notess, UP1:Aug 76:147:12330
Terrestrial Impact of Energy Complexes, Blaine E. Dinger, EFEEC:Aug 75:219
Traffic Generation from Land Development Proposals, Satish C. Sharma and Afifi H. Soliman, TE2:May 76:243:12153
Transportation Corridor Planning for Arizona Regional Airport, Wayne W. Linthacum, TE3:Aug 75:415:11478
Transportation, Land Use, and Air Quality Programs, Charles E. Dare, TE2:May 76:411:12124
Urban Sediment Problems: A Statement on Scope, Research, Legislation and Education, Harold P. Guy, Chmn., HY4:Apr 75:329:11256
Use of an EIR Process in Controlling Urban Sprawl, Randolph M. Brodersen and Leonard Ortolano, UP1:Aug 76:199:12358
Use of Remote Sensing for Mapping Wetlands, Robert J. Reimold and Rick A. Linthurst, TE2:May 75:189:11293
Use of Satellite Data in Urban Hydrologic Models, Robert M. Ragan and Thomas J. Jackson, HY12:Dec 75:1469:11790
Use of Space in Highway Impact Zone, Floyd I. Thiel, Roger D. Mingo and Jo Ann Fields, TE4:Nov 76:727:12539
Utility Land Corridors Location Model — Environmental Assessment, Thomas E. Wester and Dennis W. Weeter, Preprint No.2653, Apr 76, 29pp.
Water and Electric Power in the Pacific Northwest, Fred A. Limpert, EFEEC:Aug 75:80
Water—An Element of Land-Use and Urban Growth Policies, William R. Walker and William E. Cox, UP1:Aug 76:81:12339
Water Conflicts in Western Coal Development, Theodore T. Williams, WR2:Nov 76:327:12562
Water Quality Dimensions of Water Resources Planning, David H. Howells, HY2:Feb 75:277:11146

Land Values
Impact of Flooding on Land Transfer Prices, Wayne E. Boyet, Kenneth W. Hollman and Wayne L. Sterling, WW76:Aug 76:127

Lane Usage
Nonstructural Flood Control — A Case Study, Rex A. Burns and David H. Pilgrim, WW76:Aug 76:552

Laplace Equation
Laplacian-Isoparametric Grid Generation Scheme, Leonard R. Herrmann, EM5:Oct 76:749:12456

Large Structures
Multilevel Approach to Optimum Structural Design, Uri Kirsch, ST4:Apr 75:955:11259

Laser Beams
Tunnel Survey and Tunneling Machine Control, Edward W. Peterson and Peter Frobenius, SU1:Sept 73:21:10008

Lasers
Tunnel Survey and Tunneling Machine Control, Edward W. Peterson and Peter Frobenius, SU1:Sept 73:21:10008

Lateral Force
Analysis of Interconnected Open Section Shear Wall Structures, Bungale S. Taranath, ST11:Nov 75:2367:11736

Lateral Forces
Accuracy of Numerical Solutions for Laterally Loaded Piles in Elastic Half-Space, Aldo Evangelista and Carlo Viggiani, NMG:June 76:III-1367
Comparison of Three-Dimensional Analysis of Concrete Shear Wall Buildings and Their Actual Behavior, Venkataswamy Ramakrishnan, ST76:Aug 76:95
Fatigue Provisions of AASHTO Specifications, Kadir M. Kusmez and Chi C. Tung, ST9:Sept 76:1725:12385
Laterally Loaded Pipe Pile in Cohesionless Soil, Helmut E. Meissner, NMG:June 76:III-1353

Lateral Pressure
Analysis and Design of Laterally Loaded Piles and Caissons in a Layered Soil System, Tarun R. Naik and Alain H. Peyrot, ST76:Aug 76:589
At-Rest Lateral Earth Pressure of Consolidating Clay, M. Salah Abdelhamid and Raymond J. Krizek, GT7:July 76:721:12240
Lateral Earth Pressure at Rest in Soft Clay, K. Rainer Massarsch and Bengt B. Broms, GT10:Oct 76:1041:12476
Lateral Load-Deflection Prediction for Pile Groups, Harry G. Poulos, GT1:Jan 75:19:11061
Lateral Loading of Deep Foundations in Stiff Clay, Lymon C. Reese and Robert C. Welch, GT7:July 75:633:11456
Rheological Model of Laterally Stressed Frozen Soil, Khandker A. Aziz and Jan T. Laba, GT8:Aug 76:825:12316
3-D Analysis of Laterally Loaded Structures, Chandrakant S. Desai and G. C. Appel, Jr., NMG:June 76:I-405

Lateral Stability
Accuracy of Numerical Solutions for Laterally Loaded Piles in Elastic Half-Space, Aldo Evangelista and Carlo Viggiani, NMG:June 76:III-1367

Laterites
Need for Estimated Cement Requirements for Stabilizing Lateritic Soils, Samuel A. Ola, TE2:May 74:379:10534

Lattice Design
Field Problems of Latticed Structures, Lev Zetlin, Joseph F. Thelen and Daniel A. Cuoco, ST11:Nov 75:2241:11711

Launchers
Lateral Stability of Plane Open-Web Structures, P. C. Varghese, ST11:Nov 74:2223:10924

Launching
Floating Dry Dock Doubles as Launching Platform, Paul S. Crandall, CE:May 75:74

Law (Jurisprudence)
What To Do When the Suit is Served, Eugene B. Waggoner and John P. Bachner, CE:Apr 76:63

Law Enforcement
Dams for Others, Neil F. Bogner, EFRLD:Sept 75:137

Education and Enforcement — The Sine Qua Non of the New Traffic-Mix, Larry Wuellner, BP75:Dec 75:548
Liability Considerations in State Dam Permit and Inspection Programs (A Look at Ohio's Program), Roy Winkle, EFRLD:Sept 75:113
Liability of Public and Private Interests on Dams, Joseph A. McQuillan, EFRLD:Sept 75:177
An Outline of the Enforcement of Safety of Dams Statutes in California, Porter A. Towner, EFRLD: Sept 75:87
Text of Comments Regarding California's Legal Experience in the Liability of Public Interests, Robert W. James, EFRLD:Sept 75:115

Laws
Legal Liability and Highway Design and Maintenance, David C. Oliver, TE3:Aug 75:425: 11481

Lawsuits
Protecting Your Firm against Liability Claims, Sidney Robin and Joseph R. Syrnick, CE:June 75:66

Lawyers
Geotechnical Engineering—and the Law, CE:July 76: 18

Layers
Analysis of Multilayer Plates on Elastic Pillars, Ashok K. Chugh, Hans Gesund and Fred D. Wright, ST11:Nov 75:2405:11738
Finite Element Analysis of Layered Wood Systems, Erik G. Thompson, James R. Goodman and M. Daniel Vanderbilt, ST12:Dec 75:2659:11802
Modal Analysis for Impact of Layered Plates, James T. Kubo and Richard B. Nelson, EM1:Feb 75:45: 11133
Stiffness Coefficients for Embedded Footings, Gordon R. Johnson, Paul P. Christiano and Howard I. Epstein, GT8:Aug 75:789:11522

Layout
Design of the D/FW Airport Terminals for the Public, Tom Bear, EFAN:Dec 74:197
Free-Form Arch Dam Design System, Walter Stensch and G. Gerry, ST4:Apr 75:795:11222
Model for Layout and Design of Sewer Systems, Larry W. Mays, Harry G. Wenzel, Jr. and Jon C. Liebman, WR2:Nov 76:385:12580
A New Generation of Military Hospitals, Vernon McKenzie and Roy D. Lemons, EFAN:Dec 74:108
Some Insights into the Behavioral Evaluation of Hospitals; Results of Three Studies, Wayne D. Veneklasen, Kevin E. Coray and Sue D. Pendell, EFAN:Dec 74:127
Summary for Session III—Health Delivery Systems, Jack L. Mahan, Jr., EFAN:Dec 74:252
Working with the Health Client, James Falick, EFAN:Dec 74:116

Leaching
Coal Pile Leachate—Quantity and Quality Characteristics, William C. Anderson and Mark P. Youngstrom, EE6:Dec 76:1239:12626
County Treats Shredfill Leachate, Otto Vydra and Alfred Grimm, CE:Dec 76:55
Inverted Filter Stabilizes Soil, Stops Erosion, Chesley J. Posey, CE:Apr 76:78
Irrigation Management Decisions for Minimizing Nitrate Leaching, A. S. Dylla, D. R. Timmons and Hollis Shull, IR76:July 76:168
Sanitary Landfill Leachates and Their Leachate Treatment, Edward S.K. Chian and Poppe B. DeWalle, EE2:Apr 76:411:12033
Sprinkler Uniformity Effects on Quality of Return Flow, Ronald D. Bliesner and Lyman S. Willardson, IR76:July 76:508

Lead
Monitoring Sludge Disposal — Mid-Atlantic Shelf, Geraldine V. Cox, Steven A. Townsend and Priya Wickramarante, OE75:June 75:1314

Lead (Metal)
Lead Analysis in Dredge Spoil Elutriates, Walter G. Cox, DIEE:Jan 76:242

Lead Burning
Liability of Public and Private Interests on Dams, Joseph A. McQuillan, EFRLD:Sept 75:177

Lead Time
Design Lead Time Predictions, Earl Rogers, TE4: Nov 76:737:12569

Leakage
Modeling the Chipuxet Ground Water Aquifer, William E. Kelly, NMG:June 76:II-1188

Least Squares Method
Structural System Parameter Estimation by Two-Stage Least Squares Method, Will Gersch, George T. Taoka and Robert Liu, EM5:Oct 76:883:12464

Legal Aspects
Legal Liability and Highway Design and Maintenance, David C. Oliver, TE3:Aug 75:425: 11481
Private Constraints on Ground-Water Contamination, William R. Walker and William E. Cox, HY10:Oct 75:1333:11665
What To Do When the Suit is Served, Eugene B. Waggoner and John P. Bachner, CE:Apr 76:63

Legislation
Alberta's Viewpoint on Risk, John W. Campbell, EFRLD:Sept 75:147
Complex Source Regulation in Philadelphia, William C. Miller, Preprint No.2778, Sept 76, 24pp.
Conference Summary, Joseph J. Ellam, EFRLD:Sept 75:181
Dam Safety — Texas Style, Joe D. Carter, EFRLD: Sept 75:79
Desirable Modifications in Regulatory and Licensing Activities, Gerald Charnoff, EFEEC:Aug 75:356
Environmental Impact Reports: Problems and Opportunities, Robert L. Jones, CE:May 75:71
Factoring in Public Participation: Suggestions for Industry, Henry Herrmann, EFEEC:Aug 75:394
The Goals of Water Resources Planning and Management, Carl H. Gaum, Preprint No.2719, Apr 76, 17pp.
Impact of Public Law 92-532 on Dredging and Disposal, Kenneth S. Kamlet, DIEE:Jan 76:49
Land Use and Flood Management, Kenneth R. Wright and Ruth M. Wright, WW76:Aug 76:147
Law of Catastrophic Events on Offshore Nuclear Facilities, John D. Wik and Joseph T. Bockrath, OE75:June 75:1455
Legal-Institutional Framework for the Continental Shelf, Paul O. Bleecker, OE75:June 75:1437
Legislative Impact of P.L. 92-500 on Dredging, David H. Webb and Alfred P. Holmes, Jr., DIEE: Jan 76:83
Legislative Impacts on Dredging — General Regulatory Functions, Charles W. Hollis, DIEE:Jan 76:1
Local Land Use Control Over Critical Areas, Charles Thurow, CE:Sept 75:73
Meeting the Earthquake Challenge: California's New Laws, Karl V. Steinbrugge and Henry J. Degenkolb, CE:Feb 75:44
Metrication — An Australian Non-Event, Carter H. Harrison, Jr., CE:Oct 76:51
Municipal Problems with P.L. 92-500 — Conformance Versus Performance, Arthur F. Vondrick, Preprint No.2645, Apr 76, 15pp.
National Land-Use Policy: Is it Needed?, Daniel A. Dreyfus, UP1:Aug 76:9:12324
National Program of Inspection of Dams — *NATIONAL DAM INVENTORY*, Samuel H. Miles, EFRLD:Sept 75:23
Nebraska Flood-Plain Management Program—Part II, James R. Cook, HY7:July 75:983:11438
Origins of Federal Waterways Engineering, Leland R. Johnson, WW76:Aug 76:1130

Private Constraints on Ground-Water Contamination, William R. Walker and William E. Cox, HY10:Oct 75:1333:11665
Problems in Route Selections for Variable Characteristics of Cyclists, James L. Konski, BP75: Dec 75:261
Project Formulation in Today's World — Legislative and Regulatory Aspects, Daniel A. Dreyfus, IR76: July 76:626
Project Formulation in Today's World — The New Dimensions of Legislative and Regulatory Aspects, Reginald E. Bailey, IR76:July 76:632
Quarantine Island Disposal Plan, George Marsch, DIEE:Jan 76:579
Recent Legislation Impacting on Dredging Projects, William L. Black, Preprint No.2727, Apr 76, 23pp.
Reclamation and Western Development, Donald J. Duck, WW76:Aug 76:1114
Report of the Roundtable on Legislation, Marie E. Birnbaum, BP75:Dec 75:590
Resolutions Adopted at the Fourth National Seminar on the Planning, Design and Implementation of Bicycle and Pedestrian Facilities, Elizabeth A. Drake, BP75:Dec 75:591
Responsibility and Liability of Public and Private Interests on Dams, Jerry Phelan, EFRLD:Sept 75: 63
Review and Responsibility of State Dam Safety Programs, Bruce A. Tschantz, EFRLD:Sept 75:51
Round Table Discussion on Future Conferences, Walter H. Kraft, BP75:Dec 75:585
Subsurface Environment—Private Property or Public Domain?, William R. Walker and William E. Cox, HY11:Nov 74:1699:10958
Survival in the Legal Jungle, Frederick J. Richards, Jr., Preprint No.2761, Sept 76, 4pp.
Text of Comments Regarding California's Legal Experience in the Liability of Public Interests, Robert W. James, EFRLD:Sept 75:115
Transportation, Land Use, and Air Quality Programs, Charles E. Dare, TE2:May 76:411:12124
Trends in P.E. License Renewal Requirements, Robert D. Reckert, EI4:Oct 75:449:11667
Water Resources Planning in Urban Areas, Robert L. Fulton, HY9:Sept 75:1249:11571
Waters of the United States, William L. Black, DIEE: Jan 76:10

Length

Effective Column Length in Polygon Shaped Frames, Kuang-Han Chu and Robert H. Rampetsreiter, TN: ST8:Aug 76:1629:12288
Length of Hydraulic Jump, Subhash C. Mehrotra, HY7:July 76:1027:12272

Levees

Environmental Aspects—Sacramento Bank Protection, Charles S. Mifkovic and Margaret S. Petersen, HY5:May 75:543:11326
Levee System Reliability Along a Confluence Reach, Ferenc Szidarovsky, Lucien Duckstein and Istvan Bogardi, EM5:Oct 75:609:11621

Liabilities

What To Do When the Suit is Served, Eugene B. Waggoner and John P. Bachner, CE:Apr 76:63

Liability

Dam Safety — Texas Style, Joe D. Carter, EFRLD: Sept 75:79
Dams for Others, Neil F. Bogner, EFRLD:Sept 75: 137
Highlights of San Diego Convention, CE:June 76:67
Judgment in Dam Design, William A. Wahler, EFRLD:Sept 75:167
Legal Liability and Highway Design and Maintenance, David C. Oliver, TE3:Aug 75:425: 11481
Liability Considerations in State Dam Permit and Inspection Programs (A Look at Ohio's Program), Roy Winkle, EFRLD:Sept 75:113
Liability of Consultants in Dam Investigations, Gardner M. Reynolds, EFRLD:Sept 75:157
Liability of Public and Private Interests on Dams, Joseph A. McQuillan, EFRLD:Sept 75:177
Liability of the United States Under the Federal Tort Claims Act (28 U.S.C. ¶¶ 1346(b), 2672-80), John R. Little, Jr., EFRLD:Sept 75:121
Opening Remarks, Joseph J. Ellam, EFRLD:Sept 75: 1
Protecting Your Firm against Liability Claims, Sidney Robin and Joseph R. Syrnick, CE:June 75:66
Text of Comments Regarding California's Legal Experience in the Liability of Public Interests, Robert W. James, EFRLD:Sept 75:115

Liability Insurance

Current Competence: Current Dilemma, Virginia Fairweather, CE:July 75:50
International Law and Superport Development, Amos C. Dawson, OE75:June 75:1462
Law of Catastrophic Events on Offshore Nuclear Facilities, John D. Wik and Joseph T. Bockrath, OE75:June 75:1455
Protecting Your Firm against Liability Claims, Sidney Robin and Joseph R. Syrnick, CE:June 75:66

Libraries

A Review of Electronic Computing for Civil Engineering Within the Federal Government, David R. Schelling, Preprint No.2818, Sept 76, 29pp.

Librations

Waters of the United States, William L. Black, DIEE: Jan 76:10

Licenses

Building a Professionally Qualified Faculty, King S. Luk and Eugene H. Kopp, EI2:Apr 74:105:10466
Citizens Groups and Public Participation: Problems and Observations, Jonathan N. Brownell, EFEEC: Aug 75:388
Desirable Modifications in Regulatory and Licensing Activities, Gerald Charnoff, EFEEC:Aug 75:356
Energy Complexes: The Federal Government's Views, R. Michael Hartman, EFEEC:Aug 75:334
Professional Development—An Educator's Viewpoint, Alfred C. Ingersoll, EI4:Oct 75:471: 11660
Recent Legislation Impacting on Dredging Projects, William L. Black, Preprint No.2727, Apr 76, 23pp.
Section VII — Licensing, Peter L. Ames, EFEEC: Aug 75:425
State Government Views of Licensing Energy Complexes, Sheldon A. Schwartz, EFEEC:Aug 75: 345
Trends in P.E. License Renewal Requirements, Robert D. Reckert, EI4:Oct 75:449:11667

Licensing

New Licensing Philosophy Concerning Soil Structure Interaction, Kanwar K. Kapur, STN75:Dec 75:II-238

Life Cycles

The Systems Approach and Construction Management, Stanley Goldhaber, PROD:Aug 76:71
Value Engineering Made Mandatory on EPA Projects Over $10,000,000, Harold Tufty, CE:Sept 76:101

Lift

Transverse Forces on Vertical Cylinders in Waves, Michael de St. Q. Isaacson and David J. Maull, WW1:Feb 76:49;11934
Wave Forces on Vertical Circular Cylinder, Subrata K. Chakrabarti, Allan L. Wolbert and William A. Tam, WW2:May 76:203:12140

Ligands

Chemical Models for Metals in Coastal Environments, J. J. Morgan and T. H. Sibley, OE75:June 75:1332

Lightweight Aggregates
Synthetic Aggregate From Incinerator Residues, Horace R. Blank, EM1:Feb 76:31:11898

Lime
Dewatering Chemical-Primary Sludges, David Di Gregorio and Gerald L. Shell, EE5:Oct 76:1087:12474
Lime Recovery and Reuse in Primary Treatment, Denny S. Parker, Geoffrey A. Carthew and Gerry A. Horstkotte, EE6:Dec 75:985:11789

Limestone
Dynamic Response of Tropical Marine Limestone, Zen Yang and Allen W. Hatheway, GT2:Feb 76:123:11893
Limestone Barriers to Neutralize Acidic Streams, Frank H. Pearson and Archie J. McDonnell, EE3:June 75:425:11382
Use of Crushed Limestone to Neutralize Acid Wastes, Frank H. Pearson and Archie J. McDonnell, EE1:Feb 75:139:11131

Limit Analysis
Iterative Schemes for Slope Stability Analysis, Antonio Soriano, NMG:June 76:II-713
Plasticity Solutions for Slopes, Wai F. Chen and Nimitchai Snitbhan, NMG:June 76:II-731

Limit Design Method
Elastoplastic Analysis of Coupled Shear Walls, Kumarapillai K. Nayar and Alexander Coull, ST9:Sept 76:1845:12401
Limit Design of Folded Plate Structures, Morris N. Fialkow, ST76:Aug 76:222
Limit States Basis for Cold-Formed Steel Design, Sree R. Parimi and Niels C. Lind, ST3:Mar 76:475:12009
Plasticity Solutions for Slopes, Wai F. Chen and Nimitchai Snitbhan, NMG:June 76:II-731
Post-Crushing Behavior of Unbound Concrete Beams, Mohammad Iqbal and David S. Hatcher, ST11:Nov 75:2303:11719
Rigid-Plastic Circular Plates on Elastic Foundation, Dusan Krajcinovic, EM2:Apr 76:213:12046
The Safety of Structural Steel Columns, Reidar Bjorhovde, Preprint No.2809, Sept 76, 27pp.
Strength of Steel Box-Girder Bridges, Patrick J. Dowling, ST9:Sept 75:1929:11550
Yield-Line Design of Slabs, Sidney H. Simmonds and Amin Ghali, ST1:Jan 76:109:11853

Limiting Factors
Creep of Sand-Ice System, Robert G. Rein, Jr., Vidyutkumar V. Hathi and Cedomir M. Sliepcevich, GT2:Feb 75:115:11134
Limit Load of a Foundation in a Strain-Softening Soil, Paolo Biondi, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:I-591
Speed of Ships in Restricted Navigation Channels, R. Bryan Schofield, WW2:May 74:133:10539

Linear Differential Equations
Special Problems Related to Linear Equation Solvers, Christian Meyer, ST4:Apr 75:867:11223

Linear Programming
FEM Coupled with LP for Water Pollution Control, Tanehiro Futagami, Nobuyuki Tamai and Mashio Yatsuzuka, HY7:July 76:881:12244
Optimal Pumping for Aquifer Dewatering, Eduardo Aguado, Irwin Remson, Mary F. Pikul and Will A. Thomas, HY7:July 74:869:10639
Structural Optimization by Equilibrium Linear Programming, Kenneth F. Reinschmidt and Thanet Norabhoompipat, ST4:Apr 75:919:11219

Linear Responses
General Linear Hydrologic Response Models, Fazal H. Chaudhry, WW76:Aug 76:367

Linear Systems
Integration of Linear Equations of Motion, Robert J. Melosh, ST7:July 75:1551:11444
3-D Analysis of Laterally Loaded Structures, Chandrakant S. Desai and G. C. Appel, Jr., NMG:June 76:I-405

Linear Transformations
Tornado-Induced Waves in a Basin, Yong Kwun Chung and Herman Bomze, OE75:June 75:96

Linings
Analysis of Backpacked Liners, Sidiq M. Dar and Robert C. Bates, GT7:July 76:739:12242
Experimental Methods and Instrumentation for Power Generation Structures — Some Case Studies, Joseph W. Fortey and Raymond R. Funk, Preprint No.2717, Apr 76, 25pp.
Finite Element Analysis of Miyama Rockfill Dam, Tadatsugu Tanaka and Ryoki Nakano, NMG:June 76:II-650
Impermeable Asphaltic Concrete Pond Liner, R. Dale Hinkle, Jr., CE:Aug 76:56
Liner Anchorage Analysis for Nuclear Containments, Ted L. Winstead, Edwin G. Burdette and Daryl R. Armentrout, ST10:Oct 75:2103:11635
Liner Anchorage Tests, Edwin G. Burdette and Larry W. Rogers, ST7:July 75:1455:11432
Studies on Seepage from Canals with Partial Lining, Kanakatti Subramanya, Madhira Radha Madhav and Govinda Chandra Mishra, HY12:Dec 73:2333:10197
Tough Pollution Laws Spur Use of Impermeable Liners, Eugene E. Dallaire, CE:May 75:63

Liquefaction
Characteristics Method for Liquefaction of Soils, E. Benjamin Wylie and Victor L. Streeter, NMG:June 76:II-938
Comparison of Methods for Liquefaction Evaluation, Julio E. Valera and Neville C. Donovan, Preprint No.2752, Sept 76, 30pp.
Computation of Seismic Induced Flow Landslide, Hung Tao Shen and Wen Huang, NMG:June 76:II-1054
Cyclic Loading Liquefaction of Gravelly Soils, Robert T. Wong, H. Bolton Seed and Clarence K. Chan, GT6:June 75:571:11396
Cyclic Triaxial Strength of Standard Test Sand, Marshall L. Silver, Clarence K. Chan, Richard S. Ladd, Kenneth L. Lee, Drew A. Tiedemann, Frank C. Townsend, Julio E. Valera and James H. Wilson, GT5:May 76:511:12145
An Effective Stress Model for Liquefaction, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, Preprint No.2752, Sept 76, 30pp.
Endochronic Constitutive Law for Liquefaction of Sand, Zdenek P. Bazant and Raymond J. Krizek, EM2:Apr 76:225:12036
Evaluation of Soil Liquefaction Effects on Level Ground During Earthquakes, H. Bolton Seed, Preprint No.2752, Sept 76, 104pp.
Factors Affecting Liquefaction and Cyclic Mobility, Gonzalo Castro Salas and Steve J. Poulos, Preprint No.2752, Sept 76, 34pp.
Foundation Considerations for a Nuclear Power Plant, George A. Faillace, CO1:Mar 75:165:11181
Fundamentals of Liquefaction under Cyclic Loading, Geoffrey R. Martin, W. D. Liam Finn and H. Bolton Seed, GT5:May 75:423:11284
Hydraulic Fill Dams/Earthquake Stability, Roney A. Heinz, CE:May 76:55
In-Situ Pore Presure Measurements at Rio Blanco, John R. Banister, Robert Pyke, D. Maxwell Ellett and Leon Winters, GT10:Oct 76:1073:12471
Liquefaction and Cyclic Mobility of Saturated Sands, Gonzalo Castro Salas, GT6:June 75:551:11388
Liquefaction Considerations in Nuclear Plant Design, Joseph L. Ehasz, Jr. and William F. Mercurio, STN75:Dec 75:II-142
Liquefaction Criteria for the Trans-Alaska Pipeline, Neville C. Donovan and Sukhmander Singh, Preprint No.2752, Sept 76, 30pp.

Liquefaction during 1906 San Francisco Earthquake, T. Leslie Youd and Seena N. Hoose, GT5:May 76: 425:12143
Liquefaction Potential at Ekotisk Tank in North Sea, Kenneth L. Lee and John A Focht, Jr., GT1:Jan 75:1:11054
Massive Compaction of Granular Soil — How We Stand, Henry W. Janes and Robert D. Anderson, Preprint No.2777, Sept 76, 28pp.
A Numerical Model for Liquefaction, Chyr Pyng Liou, Victor L. Streeter and Frank E. Richart, Jr., Preprint No.2752, Sept 76, 30pp.
Pore-Water Pressure Changes during Soil Liquefaction, H. Bolton Seed, Philippe P. Martin and John Lysmer, GT4:Apr 76:323:12074
Sand Liquefaction in Large-Scale Simple Shear Tests, Pedro De Alba, H. Bolton Seed and Clarence K. Chan, GT9:Sept 76:909:12403
Seismic Response and Liquefaction of Sands, W. D. Liam Finn, Peter M. Byrne and Geoffrey R. Martin, GT8:Aug 76:841:12323
Shear Strength of Soils and Cyclic Loading, Gonzalo Castro Salas and John T. Christian, GT9:Sept 76: 887:12387
Soil Liquefaction by Torsional Simple Shear Device, Isao Ishibashi and Mehmet A. Sherif, GT8:Aug 74: 871:10752
Statistics of Liquefaction and SPT Results, John T. Christian and William F. Swiger, GT11:Nov 75: 1135:11701

Liquefied Natural Gas
Cooled Seawater Discharge in Harbor Environment, Yuan Jen and Richard B. Dornhelm, OE75:June 75:1362
LNG Terminals, Lloyd J. Weverka and Charles J. Lord, OE75:June 75:732
Pioneer Offshore LNG Terminal, Joseph Peraino and William R. Rogers, CE:Apr 76:82

Liquefied Petroleum Gases
Concrete Barge of First Totally Offshore LPG Facility, Arthur R. Anderson, CE:Apr 76:58

Litigation
Are Contractors Treated Fairly?, George A. Fox and Max E. Greenberg, CE:May 75:56
"Construction Delay: Responsibility, Risks, and Litigation," by James J. O'Brien (Book Review), Skip O. Warren, CE:Dec 76:30
An Engineer Rebuts a Contractor's Charges of Unfair Contracts, Sidney Zecher, CE:Oct 75:75
Judgment in Dam Design, William A. Wahler, EFRLD:Sept 75:167
Liability of Public and Private Interests on Dams, Joseph A. McQuillan, EFRLD:Sept 75:177
What To Do When the Suit is Served, Eugene B. Waggoner and John P. Bachner, CE:Apr 76:63

Littoral Current
Currents and Sand Transport on Beaches: A Review, Paul D. Komar, Preprint No.2707, Apr 76, 27pp.
Data Acquisition Methods for Coastal Currents, Paul G. Teleki, F. R. Musialowski and D. A. Prins, OE75:June 75:1190

Littoral Drift
Data Acquisition Methods for Coastal Currents, Paul G. Teleki, F. R. Musialowski and D. A. Prins, OE75:June 75:1190
Longshore Currents and Sand Transport on Beaches, Paul D. Komar, OE75:June 75:334
Oregon Coast Shoreline Changes Due to Jetties, Paul D. Komar, Jose Roman Lizarraga-Arciniega and Thomas A. Terich, WW1:Feb 76:13:11933
The Present Perspective of Edge Waves and Coastal Dynamics, Billy L. Edge, OE75:June 75:265
Response of Carolina Beach Inlet to a Deposition Basin Dredged in the Throat, Adrian J. Combe, III and George M. Watts, DIEE:Jan 76:719

Live Loads
Live-Load Survey Results for Office Buildings, Charles G. Culver, ST12:Dec 76:2269:12615
Shakedown of Beams on Flexible Supports, Dale G. Eyre and Theodore V. Galambos, ST5:May 76:935: 12101

Load Bearing Capacity
Ferrocement Load-Bearing Wall Elements, Prakash Desayi and Arun D. Joshi, ST9:Sept 76:1903:12420
Rating and Reliability of Railway Bridges, William G. Byers, ST76:Aug 76:153
Soil Strength Improvement Through Reinforcement, Kenneth L. Lee, Preprint No.2806, Sept 76, 28pp.

Load Control
Parametric Instabilities of Cable Hanging from Ship, William C. Kerr, OE75:June 75:569

Load Distribution
Coefficients to Analyze Rectangular Slab Bridges, Iman Hossain, ST1:Jan 75:151:11048
Stochastic Analysis of Floor Loads, Ross B. Corotis and Viresh A. Doshi, ST76:Aug 76:72

Load Factors
Commentary on Safety Factors in Plastic Design, Burl R. Richardson, TN: CO4:Dec 76:683:12590
Effective Composite Beam Width at Ultimate Load, Conrad P. Heins and Horn Ming Fan, ST11:Nov 76:2163:12538
Large Flexible Turbine Foundations, Amin M. Almuti, T76:Aug 76:707
Ultimate Live Load Distribution Factor for Bridges, Conrad P. Heins and John T.C. Kuo, ST7:July 75: 1481:11443

Loading
Analysis of Multilayer Plates on Elastic Pillars, Ashok K. Chugh, Hans Gesund and Fred D. Wright, ST11:Nov 75:2405:11738
Calculation of Raft Foundations on Clayey Silts, Quirin Laumans and Hermann Schad, NMG:June 76:1-475
Circular Mats under Arbitrary Loading, Ajoy Banerjee and Ziva D. Jankov, ST10:Oct 75:2133: 11637
Collapse Load Analysis of Frames Considering Axial Forces, M. Z. Cohn and Tariq Rafay, EM4:Aug 74: 773:10757
Embankment Loading of Hydraulic Fill, Timothy K. Dahlstrand, Preprint No.2649, Apr 76, 14pp.
Equivalent Uniform Cycle Concept for Soil Dynamics, Mokhtar Annaki and Kenneth L. Lee, Preprint No.2752, Sept 76, 28pp.
Limit Load of a Foundation in a Strain-Softening Soil, Paolo Biondi, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:1-591
Optimal Design of Multiload Multispan Systems, George I.N. Rozvany, TN: EM6:Dec 76:1085: 12591
Parametric Instabilities of Cable Hanging from Ship, William C. Kerr, OE75:June 75:569
Pneumatic Sinusoidal Loading System, Clarence K. Chan and John Paul Mulilis, TN: GT3:Mar 76:277: 11953
A Probabilistic Design Approach Using the Palmgren-Miner Hypothesis, Paul H. Wirsching and James T.P. Yao, ST76:Aug 76:324
Response of Footings on Micaceous, Cohesionless Soils, Jean M.E. Audibert, Nabil F. Ismael and G. Wayne Clough, NMG:June 76:1-567
Roundoff Error Characteristics in Direct Stiffness Solutions, Farouk S. Nasser, ST76:76:374
Statics of Suspended Cables, H. Max Irvine, EM3: June 75:187:11351
Stress Cycles for Fatigue Design of Railroad Bridges, Roman Wolchuk and Ronald M. Mayrbaurl, ST1: Jan 76:203:11857
Synthesis of Finite Element Analysis of Culverts, John F. Abel and James Neil Kay, NMG:June 76: II-873
Test Loading of Piles and New Proof Testing Procedure, Bengt H. Fellenius, GT9:Sept 75:855: 11551

3-D Analysis of Laterally Loaded Structures, Chandrakant S. Desai and G. C. Appel, Jr., NMG: June 76:I-405

Loading Tests
Load Tests of Building Structures, Richard Bares and Neal FitzSimons, ST5:May 75:1111:11322
On an Improved Application of Kotter's Equation, Hakuju Yamaguchi, Tsutomu Kimura and Nariaki Fuji-i, NMG:June 76:I-183
On Load Tests in Soft Clays, Bernd R. Thamm, NMG:June 76:I-557

Loads (Forces)
Adverse Wind Loading Induced by Adjacent Buildings, Jon A. Peterka and Jack E. Cermak, ST3:Mar 76:533:11980
Bearing Strength of Reinforced Concrete Blocks, Sanat Kumar Niyogi, ST5:May 75:1125:11325
Concrete Bearing Strength—Support, Mix, Size Effect, Sanat Kumar Niyogi, ST8:Aug 74:1685: 10765
Concrete L-Beams Subject to Combined Torsional Loads, D. Wayne Kirk and David G. McIntosh, ST1:Jan 75:269:11064
Consolidation Settlement of a Layered Subsurface, Surendra K. Saxena and Chandrakant S. Desai, NMG:June 76:III-1419
Design of Steel Transmission Pole Structures, Gene M. Wilhoite, Chmn., ST12:Dec 74:2449:11009
Drag and Inertia Coefficients in Oscillatory Flow About Cylinders, C. J. Garrison, Preprint No.2693, Apr 76, 24pp.
Ferrocement—Behavior in Tension and Compression, Colin D. Johnston and Samir G. Mattar, ST5:May 76:875:12104
Field Measurements and Load Spectra of Highway Bridges, Conrad P. Heins, ST76:Aug 76:133
Guide Criteria to Bridge and Permit Loads, David J. Chang, ST76:Aug 76:170
Least-Weight Frameworks for Loads Across Span, Richard E. McConnel, EM5:Oct 74:885:10872
Load Factor Analysis of Design of Bridges, James C. Porter, ST5:May 76:891:12098
Mean Wind Loading on Rough-Walled Cooling Towers, Cesar Farell, Oktay Guven and Federico Maisch, EM6:Dec 76:1059:12647
Nonlinear Analysis of Reticulated Space Trusses, Dharapuram S. Jagannathan, Howard I. Epstein and Paul P. Christiano, ST12:Dec 75:2641:11799
Rating and Reliability of Railway Bridges, William G. Byers, ST76:Aug 76:153
The Semi-Submersible Storage and Production Unit, Frank N. Biewer, Preprint No.2639, Apr 76, 25pp.
Some Characteristics of Mechanical Wedge System, Alexander Samson, TN: EM4:Aug 76:725:12286
Stochastic Analysis of Floor Loads, Ross B. Corotis and Viresh A. Doshi, ST76:Aug 76:72
Structural System Failure Analysis in a High Load Environment, Jon D. Collins, ST76:Aug 76:39
Structures for Power Stations in Ontario, Canada, Wojciech A. Krajewski, PO2:Nov 76:179:12527
Thermal Effect Loads of Ships on Dock Floors, Greer W. Ferver and J. Richard Lawrence, Preprint No.2651, Apr 76, 10pp.
Tornado Design Winds Based on Risk, Robert C. Garson, Jose Morla Catalan and C. Allin Cornell, ST9:Sept 75:1883:11559
Wave Forces on Bottom-Mounted Large-Diameter Cylinder, C. J. Garrison, Frederick H. Gehrman and Brian T. Perkinson, WW4:Nov 75:343:11699
Wave Induced Pressures on Submerged Plates, William W. Durgin and Jong-Chiang Shiau, WW1: Feb 75:59:11098
Wheel Load Stress Concentrations on Crane Runway Girders, G. J.K. Asmis, ST76:Aug 76:1005

Load Shifting
Parametric Instabilities of Cable Hanging from Ship, William C. Kerr, OE75:June 75:569

Load Transfer
Load Transfer and Hydraulic Fracturing in Zoned Dams, Fred H. Kulhawy and Thomas M. Gurtowski, GT9:Sept 76:963:12400

Local Government
Countywide Land Use Forecasts, Robert E. Heightchew, Jr., UP2:Nov 75:135:11682

Locking
Base Pressure of Oscillating Circular Cylinders, Peter K. Stansby, EM4:Aug 76:591:12311

Locks (Waterways)
Canal Development in Early America, Richard G. Waugh, Jr., Preprint No.2774, Sept 76, 30pp.
Discharge Computations at River Control Structures, Dannie L. Collins, HY7:July 76:845:12237
Flow of Pollutants through a Lock, Edwin P. Russo, TN: WW2:May 76:267:12096
The Green Bay—Fox River System in Transition, Harold John Day, WW76:Aug 76:527
Ice Removal From the Walls of Navigation Locks, Guenther E. Frankenstein, James L. Wuebben, H. H.G. Jellinek and R. Yokota, WW76:Aug 76:1487
Lower Granite Lock — Prototype Performance, George C. Richardson, WW76:Aug 76:1442
Marseilles Lock Rehabilitation: Illinois Waterway, James P. Jones and Ralph E. Houck, WW76:Aug 76:249
River-Ice Problems: A State-of-the-Art Survey and Assessment of Research Needs, John F. Kennedy, Cochmn. and George D. Ashton, Cochmn., HY1: Jan 74:1:10281

Lodgepole Pine Trees
Hydrology of Patch Cuts in Lodgepole Pine, James R. Meiman and Thomas L. Dietrich, IR1:Mar 75: 41:11197

Loess
Collapsible Soils, John P. Bara, Preprint No.2797, Sept 76, 12pp.
The Yellow River: Its Unique Features and Serious Problems, Tsung-Lien Chou, WW76:Aug 76:507

Logarithms
Pocket Calculators Take Hold in Civil Engineering, Eugene E. Dallaire, CE:Feb 75:39

Logic Design
ACI Building Code in Decision Logic Table Format, Jimmy L. Noland and Chuan C. Feng, ST4:Apr 75: 677:11220

Logic Devices
ACI Building Code in Decision Logic Table Format, Jimmy L. Noland and Chuan C. Feng, ST4:Apr 75: 677:11220

Logs
Observations of Natural and Man-Made River Spurs, Thomas Blench, Victor J. Galay and E. K. Yaremko, WW76:Aug 76:1363

Louisiana
Elutriation of Dredge Material in New Orleans Harbor, Charles Grimwood and Terence J. McGhee, WW76:Aug 76:476
Hydraulic Modeling Techniques in a Backwater Area, Phil G. Combs, Nolan K. Raphelt and James E. Foster, WW76:Aug 76:232
New Orleans Grows on Deep Piles, Roney A. Heinz, CE:Apr 76:73
The Superdome Foundation, Thor L. Anderson and Melvin C. Williams, CO1:Mar 76:81:11971

Low Flow
Effects of Man on Low Flows, Henry C. Riggs, IR76: July 76:306
Low Flow Criteria for Diversions and Impoundments, Sie Ling Chiang and Fred W. Johnson, WR2:Nov 76:227:12553

Low Flow Modeling in Small Steep Watersheds, David S. Bowles and J. Paul Riley, HY9:Sept 76: 1225:12405

Low-Flow Augmentation
Effects of Man on Low Flows, Henry C. Riggs, IR76: July 76:306

Low Temperature
Low-Temperature Tests of Simulated Bridge Members, Charles G. Schilling, Karl H. Klippstein, John M. Barsom, Stephan R. Novak and Gilbert T. Blake, ST1:Jan 75:31:11049

Machine Design
Tapered Plane Stress Annular Sector Finite Element, Victor A. Pulmano, EM4:Aug 75:349:11498

Machine Foundations
Dynamic Response of Embedded Machine Foundations, Kenneth H. Stokoe, II and Frank E. Richart, Jr., GT4:Apr 74:427:10499
Large Flexible Turbine Foundations, Amin M. Almuti, T76:Aug 76:707
Natural Frequencies of a Turbine Foundation, Chung-Tung Shen and Norman E. Stone, STN75: Dec 75:II-302
Nonlinear Analysis of Foundation Vibrations, Mete Oner and Nilmar Janbu, NMG:June 76:II-1025
Optimal Aseismic Design of Building and Equipment, Shih-Chi Liu, M. R. Dougherty and F. Neghabat, EM3:June 76:395:12208
Vibration-Absorber Effect under Seismic Excitation, Richard G. Dong, ST10:Oct 76:2021:12495

Magnetic Loop Detectors
The Wrong Way Is Sometimes the Right Way, Marshall Suloway, TE4:Nov 76:617:12518

Maine
Highly Energy Efficient — Wilton Wastewater Treatment Plant, Douglas A. Wilke and David R. Fuller, CE:May 76:70
A Potential Irrigation-Conservation Program for 300,000 Acres in Northern Maine, Robert G. Hunt, Preprint No.2762, Sept 76, 23pp.

Maintenance
Building and Operating Costs Versus Rental Income, Clayford T. Grimm, EI3:July 76:355:12270
Case History — Problems in Obtaining Repairs to Barber Dam, A. Kenneth Dunn, EFRLD:Sept 75:93
Cost Effectiveness Maintenance-Management Systems, Gary N. Shofner, TE2:May 76:331:12133
Evergreen Point Bridge Maintenance Problems, Colin B. Brown, D. R. Christensen and G. F. Demich, ST76:Aug 76:189
Fibrous Concrete Repair of Cavitation Damage, Ernest K. Schrader and Anthony V. Munch, CO2: June 76:385:12198
Hardinge Bridge Span Repair, Amitabha Ghosal, Jagadish C. Ganguly, Himangsu K. Banerjee and Mahesh P. Kapoor, CO4:Dec 74:631:11034
Legal Liability and Highway Design and Maintenance, David C. Oliver, TE3:Aug 75:425: 11481
Liability of Public and Private Interests on Dams, Joseph A. McQuillan, EFRLD:Sept 75:177
Maintenance Dredging and Four Polychaete Worms, James E. McCauley, Danil R. Hancock and Robert A. Parr, DIEE:Jan 76:673
Maintenance Dredging on the Arkansas River, Tasso Schmidgall, WW76:Aug 76:459
Maintenance Management Aids, Eugene L. Marvin, Preprint No.2637, Apr 76, 25pp.
Marseilles Lock Rehabilitation: Illinois Waterway, James P. Jones and Ralph E. Houck, WW76:Aug 76:249
Operation and Maintenance of Irrigation and Drainage Systems: Section IV — Maintenance, Richard A. Smith, Chmn., IR1:Mar 76:1:11963
Pavement Applications for Steel Fibrous Concrete, David R. Lankard and Alvin J. Walker, TE1:Feb 75:137:11108
The Port of Philadelphia — Past and Present, Clarence F. Wicker, Preprint No.2774, Sept 76, 20pp.
Practical Applications of the Mini Computer to Structure in Railway Maintenance Programs, Noam Eimer and Richard A. Teichman, Jr., ST76:Aug 76: 675
Rating and Reliability of Railway Bridges, William G. Byers, ST76:Aug 76:153
Repair of Earthquake Damaged Underground Reservoir, Daniel J. Smith, Jr., CO3:Sept 74:449: 10825
Revival of Inland Navigation in Pakistan, Irshad Ahmad, WW76:Aug 76:84
Shoaling Rate Prediction Using a Sedimentation Tank, Craig H. Everts, OE75:June 75:294
A Study of the Effects of Maintenance Dredging on Selected Ecological Parameters in the Gulfport Ship Channel, Gulfport, Mississippi, Joseph W. Markey and Hugh D. Putnam, DIEE:Jan 76:821

Maintenance Costs
Gabions, Perforated Pipe and Gravel Serve as Fish Screens, Reuben E. Schmidt and Kenneth R. McSwain, CE:May 76:73

Malls
Nicollet Avenue Case Study, Rodney E. Engelen, EFAN12:Dec 74:231
Nicollet Avenue Case Study, Rodney E. Engelen, Preprint No.2672, Apr 76, 14pp.
Reporter's Summary of Discussions for Session V — Center City Malls, Jack L. Mahan, Jr., EFAN:Dec 74:278
Summary for Session V—Case Study of a Central City Mall, Rodney E. Engelen, EFAN:Dec 74:275
Washington, D.C. Mall Tunnel, Allan B. MacPherson and Philip E. Egilsrud, CE:Feb 75:64
The Wrong Way is Sometimes the Right Way, Marshall Suloway, Preprint No.2697, Apr 76, 18pp.

Man
Architects and Nature: On the Primacy of Man, Eric Hoffer, EFAN:Dec 74:8
The Constructed Environment with Man as the Measure as Part of the Quality System in Construction, Cabell Gwathmey, Chmn., EFAN: Nov 74
Measuring Quality of Constructions with Man as the Measure, Ronald W. Petersen, EFAN:Dec 74:70
New Building Measures Needed in Order to Design for People, Calvin W. Taylor, EFAN:Dec 74:47
Reporter's Summary for Session VI—Summary Session, Cabell Gwathmey, EFAN:Dec 74:292
Summary for Session II - Human Factors Affecting the Constructed Environment, Kevin E. Coray and Ronald W. Petersen, EFAN:Dec 74:249

Management
Analysis and Management of Water Distribution Systems, Hubert Demard, Bernard Bobee and Jean-Pierre Villeneuve, UP2:Nov 75:167:11679
ASCE Urban Water Resources Research Program, Murray B. McPherson and George F. Mangan, Jr., HY7:July 75:847:11445
Civil Engineering Management - Prerequisites and Objectives, Eugene J. Peltier, EI1:Jan 75:5:11060
Concepts of Project Planning and Control, Boyd C. Paulson, Jr., CO1:Mar 76:67:11984
Concrete Structures for Subsea Oil Recovery — Design Considerations, Everald V. Wright and Marcel Gerbault, Preprint No.2675, Apr 76, 21pp.
Construction Cash Flow Management System, Kenneth F. Reinschmidt and Walter E. Frank, CO4:Dec 76:615:12610
Construction Productivity — How to Improve It, CE: Oct 76:57
Cost Effectiveness Maintenance-Management Systems, Gary N. Shofner, TE2:May 76:331:12133
Developments in CPM, PERT, and Network Analysis, Calin Popescu and John D. Borcherding, CO4:Dec 75:769:11763

Development Versus Preservation: Legal Accommodation, William E. Cox and William R. Walker, WW76:Aug 76:161
Education for the Professional Construction Manager, Mark H. Jordan and Robert I. Carr, CO3:Sept 76: 511:12392
Engineering Education: Can It be More Practical?, Robert W. Richards, CE:July 75:60
Engineering Risk Management of Natural and Man-Made Hazards, Larry T. Lee and Jon D. Collins, Preprint No.2757, Sept 76, 30pp.
Engineering Scheduling with Manpower Allocation, Jerome P. Miller, Jr., EI2:Apr 75:107:11255
Engineers and Computers — Interaction or Reaction, Richard L. Bland, EI2:Apr 75:79:11253
Engineers Joint Council Takes Stock, Changes Structure of Governing Board, CE:Dec 76:49
Estimation and Control of Construction Labor Costs, Boyd C. Paulson, Jr., CO3:Sept 75:623:11579
Future of Highways, Fiscal Constraints, Srikanth Rao, Thomas D. Larson and Theodore H. Poister, Preprint No.2768, Sept 76, 24pp.
Goals for Education and Research in Construction, Boyd C. Paulson, Jr., CO3:Sept 76:479:12393
The Great River Study — A New Perspective in River Management, William R. Pearson and Dennis E. Cin, WW76:Aug 76:536
A Home-Study Program on Civil Engineering Management, Kenneth P. Buchert, CE:Mar 75:81
Interdisciplinary Approach to Central City Development, Albert A. Dorman, Preprint No.2749, Sept 76, 10pp.
Irrigation Management Decisions for Minimizing Nitrate Leaching, A. S. Dylla, D. R. Timmons and Hollis Shull, IR76:July 76:168
Land Use and Flood Management, Kenneth R. Wright and Ruth M. Wright, WW76:Aug 76:147
Land-Use and Growth Management—A Comment for Professionals, Randall Scott, UP1:Aug 76:73: 12359
Land-Use Model for Service Area Projection, Peter M. Meier, EE1:Feb 76:71:11932
Maintaining Water Quality in Voyageurs National Park, William H. Anderl, Preprint No.2686, Apr 76, 14pp.
Maintenance Management Aids, Eugene L. Marvin, Preprint No.2637, Apr 76, 25pp.
Management Careers for Engineers, Harold G. Evans, EI4:Oct 76:409:12497
Management Model for Wastewater Disposal on Land, A. Koenig and Daniel P. Loucks, IR76:July 76:321
Management Processes and Their Affect on Productivity, Chris F. Woods, PROD:Aug 76:113
Managing a Computer Program Development Project, A. Murray Lount, ST76:Aug 76:921
The New Montreal International Airport, G. Y. Sebastyan, CO2:June 75:317:11346
New Productivity Improvement Strategies for the Engineering/Construction Industry, Arnold S. Judson, PROD:Aug 76:49
Nonstructural Flood Control — A Case Study, Rex A. Burns and David H. Pilgrim, WW76:Aug 76:552
Optimal Control of Nitrogen Losses from Land Disposal Areas, Douglas A. Haith, EE6:Dec 73: 923:10200
Productivity as Influenced by Design Management Processes, Winfield O. Salter, PROD:Aug 76:1
Productivity Improvements Achieved in Navy Public Works Operations, Albert R. Marschall, PROD: Aug 76:135
Professional Construction Management, Donald S. Barrie and Boyd C. Paulson, Jr., CO3:Sept 76:425: 12394
Project Communication and the Washington Metro System, William S. Alldredge, PROD:Aug 76:153
Reducing Construction Accidents—Top Management's Role, Raymond E. Levitt and Henry W. Parker, CO3:Sept 76:465:12384
The Systems Approach and Construction Management, Stanley Goldhaber, PROD:Aug 76:71
The Trouble with Municipal Public Works, William E. Fendley, EI2:Apr 76:173:12077
Water Quality Management and Information Systems, William D. Haseman, Arthur Z. Lieberman and Andrew B. Whinston, HY3:Mar 75: 477:11185

Management Analysis

Increased Productivity Through Effective Public Information, Michael J. Scanlon, PROD:Aug 76: 177

Management Engineering

Management Processes and Their Affect on Productivity, Chris F. Woods, PROD:Aug 76:113
Simulation of Water Quality Management Policies, John W. Hyden, James A. Chisman and Hugh H. Macaulay, EE4:Aug 75:623:11524

Management Games

CONSTRUCTO — An Interactive Gaming Environment, Daniel W. Halpin, CO1:Mar 76:145: 11969

Management Systems

FILES: Automated Engineering Data Management System, Leonard A. Lopez, ST4:Apr 75:661:11241

Manholes

Discs Reduce Manhole Infiltration, Warren S. O'Sullivan, CE:Aug 75:77
Laboratory Study of Energy Losses at Storm Sewer Junctions, Jan R. Prins and David R. Townsend, IR76:July 76:609

Manifolds

Wastewater Disposal by Submerged Manifolds, Paul Liseth, HY1:Jan 76:1:11839

Mannings Equation

Manning's Roughness for Artificial Grasses, Walter H. Graf and V. Heang Chhun, IR4:Dec 76:413: 12603

Manpower

Engineering Scheduling with Manpower Allocation, Jerome P. Miller, Jr., EI2:Apr 75:107:11255
Manpower Use in High-Rise Residential Construction, Ira H. Kleinfeld, CO2:June 76:379: 12178

Manpower Utilization

Federal Manpower in Water Resource Engineering, Edward R. Lewandowski, WR2:Nov 76:185:12533
Manpower Use in High-Rise Residential Construction, Ira H. Kleinfeld, CO2:June 76:379: 12178

Manual Control

Diary of a Sick Control System, Robert L. Hardison, CE:May 75:68

Manufacturing Standards

Dialog Between Engineers: Designers, Contractors, Manufacturers, CE:Dec 75:65

Mapping

Automatic Surveying — Updating Canada's Control, Leslie O'Brien, CE:Feb 76:57
Automation in Surveying and Mapping: Present and Future, Morris M. Thompson, Preprint No.2760, Sept 76, 17pp.
The Brock and Weymouth Photogrammetric Mapping Equipment, Alfred O. Quinn, Preprint No.2789, Sept 76, 10pp.
City's Topographic Mapping System Saves Time, Money and is More Accurate, CE:Sept 76:98
Computer Cartography Offers County Unlimited Combinations and Considerable Savings, Vern Cartwright and Joseph P. Alessandri, CE:Nov 76:60
A Decade of Research in Surveying and Mapping, Morris M. Thompson, SU1:Oct 75:1:11626
Engineering Geologic Data for Land-Use Planning, John D. Rockaway, UP2:Nov 75:117:11681

Evaluation of Automatic Cartographic Systems for Engineering Mapping Functions, Antonio M. Aguilar, SU1:Oct 75:17:11625
Landmarks Attest CE Contribution to Progress, CE: Aug 76:76
Landslide Hazard Mapping on a Shoestring, Clarence B. Drennon and William G. Schleining, SU1:Oct 75:107:11655
Nebraska Flood-Plain Management Program—Part II, James R. Cook, HY7:July 75:983:11438
Recycling Older Buildings Preserves History, Saves Money, Harold H. Franke, CE:Oct 75:55
Surveying-Mapping Research from Earth Satellites, Charles K. Paul, SU1:Oct 75:27:11628
Use of Remote Sensing for Mapping Wetlands, Robert J. Reimold and Rick A. Linthurst, TE2:May 75:189:11293

Maps
City's Topographic Mapping System Saves Time, Money and is More Accurate, CE:Sept 76:98
Corner Restoration in Missouri, Norman L. Brown, SU1:Oct 75:101:11658
Quantitative Assessment of Changes in Urban Runoff, Irina Cech and Karen Assaf, IR1:Mar 76: 119:11957
Seismic Risk Map, CE:Dec 76:59

Marinas
Control of High Velocity Flow Into a Tidal Basin, Alex Sheydayi, WW76:Aug 76:999

Marine Algae
Nutrient Transformations in Mass Cultures of Marine Algae , Joel C. Goldman and John H. Ryther, EE3: June 75:351:11358

Marine Clays
In-Situ Undrained Shear Strength of Two Marine Clays, Demetrious Koutsoftas and Joseph A. Fischer, GT9:Sept 76:989:12431
On Load Tests in Soft Clays, Bernd R. Thamm, NMG:June 76:1-557

Marine Engineering
Impact on Marine Benthos of Waste Water Discharge, Gerald T. Orlob and Dennis A. O'Leary, Preprint No.2658, Apr 76, 25pp.
Luncheon Remarks at Ocean Engineering III, Robert I. Price, OE75:June 75:1485
Materials and Specification for Marine Structures, D. L. Frisby, OE75:June 75:818
OCIMF Marine Terminal Activities, Thomas F. Bell, Preprint No.2654, Apr 76, 25pp.
Use of Jet Pumps in Marine Waste Disposal, Yerachmiel Argaman, Michael Vajda and Noah Galil, EE5:Oct 75:703:11639

Marine Geology
Geotechnical Input for Deep-Water Pipelines, Bing C. Yen, R. Leonard Allen and Harry H. Shatto, OE75:June 75:504
Marine Soil Mechanics and Foundations II, State-of-the-Art Summary, Anton L. Inderbitzen, OE75: June 75:486

Marine Terminals
Dynamics of Marine Structures, Joseph P. Murtha, OE75:June 75:914
Materials and Specification for Marine Structures, D. L. Frisby, OE75:June 75:818

Marine Transportation
Effect of Flow Regulation on Navigation Fuel Costs, Jean-Pierre Granju and Walter O. Wunderlich, WW76:Aug 76:65
Marine Alternatives for Rapid Transit in Hawaii, Theodore T. Lee, WW76:Aug 76:107
Side Scan Sonar Views of Channel Disturbances Associated with Marine Traffic and Dredging, Larry S. Slotta, DIEE:Jan 76:226

Marketing
Developing and Maintaining Client Relationship in the Marketing of Engineering Services, Arnold Olitt, CE:June 76:66
Marketing's Role in Construction Firms, Richard M. Bessom, CO3:Sept 75:647:11592

Market Research
Marketing's Role in Construction Firms, Richard M. Bessom, CO3:Sept 75:647:11592

Markov Processes
Wet and Dry Periods of Annual Flow Series, Zekai Sen, HY10:Oct 76:1503:12457

Marshes
Spartina Revegetation on Dredge Spoil in SE Marshes, William M. Dunstan, Gregory L. McIntire and Herbert L. Windom, WW3:Aug 75: 269:11530
Soil-Plant Relationships in Dredged Material Marshes with Particular Reference to Heavy Metal and Nutrient Availability, J. S. Boyce, DIEE:Jan 76:496

Maryland
Evaluation of the Maryland Bikeway Program, Paul R. Farragut, BP75:Dec 75:443

Masonry
Design for Differential Movement in Brick Walls, Clayford T. Grimm, ST11:Nov 75:2385:11739
Resistance of Masonry Infill Walls to Out-of-Plane Dynamic Motion, Bernard L. Gabrielsen and Kenneth Kaplan, Preprint No.2771, Sept 76, 26pp.
Strength and Related Properties of Brick Masonry, Clayford T. Grimm, ST1:Jan 75:217:11066
The Turn From Masonry: A Study of Arch Bridges in Reinforced Concrete, David P. Billington, Preprint No.2819, Sept 76, 30pp.

Mass
Dynamic Response of Cantilevers with Attached Masses, Anthony N. Kounadis, EM5:Oct 75:695: 11616
Wave Forces on Cylinders Near Plane Boundary, Tokuo Yamamoto, John H. Nath and Larry S. Slotta, WW4:Nov 74:345:10944

Massachusetts
Early Crises in the Port of Boston, James R. Cass, Jr., Preprint No.2774, Sept 76, 25pp.
Greater Lawrence Transportation Improvements Study, Maurice Freedman, Preprint No.2763, Sept 76, 30pp.
Seismic Risk Analysis of Boston, C. Allin Cornell and Hans A. Merz, ST10:Oct 75:2027:11617
Waste Generation Models for Solid Waste Collection, Donald Grossman, James F. Hudson and David H. Marks, EE6:Dec 74:1219:11022

Mass Flow
Tide-Induced Mass Transport in Lagoons, Jacobus van de Kreeke and Robert G. Dean, WW4:Nov 75: 393:11731

Mass Transfer
Slime Holdup, Influent BOD, and Mass Transfer in Trickling Filters, Bernard Atkinson and John A. Howell, EE4:Aug 75:585:11505

Mass Transportation
Automated Ground Transportation System Stations with Multiple Loading Positions, Dietrich R. Bergmann, TE2:May 75:383:11328
Distribution of Benefits of Public Transit Projects, Arun Chatterjee and Kumares C. Sinha, TE3:Aug 75:505:11497
Factors Affecting Reliability of Urban Bus Services, Brian P. Sterman and Joseph L. Schofer, TE1:Feb 76:147:11930
The Future of Highways From the Mass Transit Viewpoint, E. L. Tennyson, Preprint No.2751, Sept 76, 17pp.

The Sinking of the Amsterdam Metro, David Halperin, CE:Sept 75:92
Two Means of Alleviating Rush-Hour Crowding, Charles Libove, TE4:Nov 73:845:10144

Master Plans
Implementation of Interstate Water Quality Plan, Cecil H.J. Hull, HY3:Mar 75:495:11177
Legal Perspective on Water Quality Management, Douglas R. Blazey, HY5:May 75:595:11320
Method for Designing Airport Terminal Concepts, John P. Braaksma and John H. Shortreed, TE2: May 75:321:11308

Materials
Behavior of Cold-Rolled Stainless Steel Members, Shien T. Wang, Samuel J. Errera and George Winter, ST11:Nov 75:2337:11724
Fracture of Pavement Materials, Geoffrey E. Blight, TE4:Nov 73:801:10139
Integrated Study of Reinforced Earth-I: Theoretical Formulation, Karl M. Romstad, Leonard R. Herrmann and Chih-Kang Shen, GT5:May 76:457: 12144
New Productivity Improvement Strategies for the Engineering/Construction Industry, Arnold S. Judson, PROD:Aug 76:49
Polymer-Impregnated Concrete: Field Studies, Harshavardhan C. Mehta, John A. Manson, Wai F. Chen and John W. Vanderhoff, TE1:Feb 75:1: 11103
Polymer-Impregnated Concrete: Laboratory Studies, Einar Dahl-Jorgensen, Wai F. Chen, John A. Manson, Yu-Nan Liu and John W. Vanderhoff, TE1:Feb 75:29:11101
Statistical Variation of the Compliance of Coal, Richard Henry Atkinson and Hon-Yim Ko, NMG: June 76:I-367

Materials Handling
Fifty-Year Highlights of Tunneling Equipment, David A. Day and Bradford P. Boisen, CO2:June 75:265: 11393

Materials Handling Equipment
Job-Site Innovations Slash Time, Cost of Constructing Canada's Tallest Skyscraper, Keith E. Roberts, CE:Aug 76:42

Materials Specifications
Full-Depth Asphalt Airfield Pavements, Matthew W. Witczak and James F. Shook, TE2:May 75:297: 11331
A Heuristic Game for Material Selection in Structural Design Using the Hybrid Computer, Rick R. Evans, Subhash C. Anand and Myron Spector, Preprint No.2737, Sept 76, 25pp.

Materials Tests
Constrained and Shear Moduli for Finite Element, Vincent P. Drnevich, GT5:May 75:459:11319
Dual Failure Criterion for Plain Concrete, Han-Chin Wu, EM6:Dec 74:1167:10996
Ferrocement—Behavior in Tension and Compression, Colin D. Johnston and Samir G. Mattar, ST5:May 76:875:12104
Ferrocement—Material Behavior in Flexure, Colin D. Johnston and Dallas N. Mowat, ST10:Oct 74:2053: 10878
Polymer-Impregnated Concrete: Field Studies, Harshavardhan C. Mehta, John A. Manson, Wai F. Chen and John W. Vanderhoff, TE1:Feb 75:1: 11103
Significance of Variably Confined Triaxial Testing, John J. Allen and Marshall R. Thompson, TE4:Nov 74:827:10911

Mathematical Analysis
Analysis of Regional Waste Treatment Systems, Dennis W. Weeter and James G. Belardi, TN: EE1: Feb 76:233:11883
Evaluation of Friction Slope Models, Joseph R. Reed and Albert J. Wolfkill, WW76:Aug 76:1159
Optimization of Design Capacity of an Aqueduct, Jayant Sathaye and Warren A. Hall, IR3:Sept 76: 295:12396
Salinity Intrusion Mechanisms in Estuaries, John M. Hamrick, OE75:June 75:1382
Variational Principles for Finite Element Analysis of Consolidation, Ranbir S. Sandhu, NMG:June 76:I-20

Mathematical Models
Acoustic Radiation of Submerged Vibrating Structures, Robert R. Smith and John T. Hunt, Preprint No.2711, Apr 76, 16pp.
Aggregate and Disaggregate Travel Demand Models, Arnim H. Meyburg and Peter R. Stopher, TE2:May 75:237:11299
Analysis of Multiple Objectives in Water Quality, Yacov Y. Haimes and Warren A. Hall, HY4:Apr 75:387:11234
Analytical Model of Hydraulic Pipeline Dredge, David R. Basco, WW1:Feb 75:33:11097
Aqueduct Optimization with Intermediate Storage, Jayant Sathaye and Warren A. Hall, IR2:June 76: 249:12180
Bidding Models: Truths and Comments, Michael Fuerst, CO1:Mar 76:169:11991
Calculations to Test a Pack Ice Model, Max D. Coon, Roger Colony, Robert S. Pritchard and D. A. Rothrock, NMG:June 76:II-1210
Classification of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY10:Oct 75:1315: 11643
Computation of Flow through Masonboro Inlet, N.C., Michael Amein, WW1:Feb 75:93:11124
A Difference Scheme for the AIDJEX Sea Ice Model, Robert S. Pritchard and Roger Colony, NMG:June 76:II-1194
Entropy Model and Intercity Modal Split in the UK, Gerald R. Leake and John R. Underwood, TE2: May 76:215:12110
Evaluating Rainfall-Runoff Model Performance, Ian D. Moore and Russell G. Mein, TN: HY9:Sept 76: 1390:12368
Finite Element Model for Cohesive Sediment Transport, Ranjan Ariathurai and Ray B. Krone, HY3:Mar 76:323:11987
Finite Element Solution of Saint-Venant Equations, Richard L. Cooley and Syed Afaq Moin, HY6:June 76:759:12213
Flood Control for an Island Sited Nuclear Plant, Joel L. Caves, WW76:Aug 76:872
Flood Routing in Meandering Rivers with Flood Plains, Danny L. Fread, WW76:Aug 76:16
Gates' Bidding Model—A Monte Carlo Experiment, Marvin Gates, CO4:Dec 76:669:12631
Generalized Cap Model for Geological Materials, Ivan S. Sandler, Frank L. DiMaggio and George Y. Baladi, GT7:July 76:683:12243
Hydraulic Modeling Techniques in a Backwater Area, Phil G. Combs, Nolan K. Raphelt and James E. Foster, WW76:Aug 76:232
Implicit Numerical Modeling of Unsteady Flows, Michael Amein and Hsiao-Ling Chu, HY6:June 75: 717:11378
Independent Comparison of Three Urban Runoff Models, David P. Heeps and Russell G. Mein, HY7:July 74:995:10685
Influence of Soil Models on Seismic Response, Adekunle Oguntala, NMG:June 76:II-1060
Influence of Tidal Inlets on Salinity in Estuaries, N. Jothi Shankar, WW4:Nov 75:369:11692
Instability in Tidal Flow Computational Schemes, T. John Weare, HY5:May 76:569:12100
Interaction of Soil and Power Plants in Earthquakes, Jeremy Isenberg and Samy A. Adham, PO2:Oct 72: 273:9242
Landslide Generated Water Wave Model, Donald C. Raney and H. Lee Butler, HY9:Sept 76:1269:12425
Land-Use Model for Service Area Projection, Peter M. Meier, EE1:Feb 76:71:11932
Limestone Barriers to Neutralize Acidic Streams, Frank H. Pearson and Archie J. McDonnell, EE3: June 75:425:11382

Management Model for Wastewater Disposal on Land, A. Koenig and Daniel P. Loucks, IR76:July 76:321
Mathematical Modelling of Rivers with Flood Plains, Miodrag Radojkovic, WW76:Aug 76:56
Mathematical Model of the Bicol River System (Luzon, Philippines), Armando Ballofet and Virgilio A. Sahagun, WW76:Aug 76:170
Mathematical Model to Simulate Channel Deformation, Purshottam Dass and Daryl B. Simons, WW76:Aug 76:1
Mean Estimate Deficiencies in Water Quality Studies, Barry J. Adams and Robert S. Gemmell, HY7:July 75:989:11450
Modeling Method Productivity, James J. Adrian and LeRoy T. Boyer, CO1:Mar 76:197:11983
Modeling of Coastal Dredged Material Disposal, Stuart P. Bowen, DIEE:Jan 76:202
Modeling of Health Care Delivery, Jeng Wen Hwang and Milton E. Harr, UP1:Aug 76:157:12345
Models for Scheduling Releases from Multireservoir Systems: A State-of-the-Art Review, Oskar T. Sigvaldson, IR76:July 76:331
Numerical Model of St. Lawrence River Estuary, David Prandle and Norman L. Crookshank, HY4:Apr 74:517:10472
A Numerical Model of the Time-Dependent, Three-Dimensional Structure of Circulation in Large Lakes, Ralph Ta-shun Cheng, Preprint No.2692, Apr 76, 27pp.
Optimal Activated Sludge Design under Uncertainty, Arthur R. Tarrer, C. P. Leslie Grady, Jr., Henry C. Lim and Lowell B. Koppel, EE3:June 76:657:12207
Optimal Control of Nitrogen Losses from Land Disposal Areas, Douglas A. Haith, EE6:Dec 73:923:10200
Optimal Design of Chlorination Systems, Madhav L. Tikhe, EE5:Oct 76:1019:12487
Optimal Sizing of Urban Flood-Control Systems, Darryl W. Davis, HY8:Aug 75:1077:11490
Optimum Pipe Sizing in a Branching Irrigation System, T. Al Austin, Preprint No.2679, Apr 76, 14pp.
Oxygen Depletion Model for Cayuga Lake, J. Denis Newbold and James A. Liggett, EE1:Feb 74:41:10346
Parametric Studies as a Design Aid in Tunneling, K. Kovari, H. Hagedorn and P. Fritz, NMG:June 76:II-773
Predicting Demand for Engineered Facilities, James P. Romualdi, EI3:July 75:365:11426
Predicting Estuarine Salinity from River Inflows, James A. Harder, Preprint No.2674, Apr 76, 23pp.
Predicting Material Transportation in Mobile Bay, Gary C. April, Samuel Ng, Hua-An Liu and Donald O. Hill, DIEE:Jan 76:833
Prediction of Flow Development on Spillways, Robert J. Keller and Ashok K. Rastogi, HY9:Sept 75:1171:11581
Processing Variable Forms for Travel Estimation, Jason C. Yu and Robert J. Popper, TE1:Feb 76:91:11938
QUURM — Implications for the Design of Urban Drainage Systems, W. Edgar Watt, Kenneth C. Wilson and Joan E. Eaton, IR76:July 76:580
Review of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY11:Nov 75:1405:11693
Rigid-Plastic Circular Plates on Elastic Foundation, Dusan Krajcinovic, EM2:Apr 76:213:12046
River Basin Model for Simulating Flood Control Alternatives, Norbert L. Ackermann and Hiro Shigai, WW76:Aug 76:348
Screening Model for Conjunctive-Use Water Systems, Abdullatif S. Hamdan and Dale D. Meredith, HY10:Oct 75:1343:11611
Sediment Flushing after Dredging in Tidal Bays, Klas Cederwall and Torbjorn Svensson, HY7:July 76:935:12229
Seismic Cracking of Concrete Gravity Dams, Narinder Pal, ST9:Sept 76:1827:12432
Sensitivity of Estuarine Circulation Model, John D. Wang, OE75:June 75:1035
Shooting Models for Salinity and Coliform, Benjamin J. Olufeagba and Robert H. Flake, EE1:Feb 76:95:11939
Simple Nonlinear Model for Flood Estimation, Russell G. Mein, Eric M. Laurenson and Thomas A. McMahon, HY11:Nov 74:1507:10933
Solutions of Impact Problems for Structural Dynamic Analyses, Robert J. McCaffery, STN75:Dec 75:II-47
Steady-State Water Quality Modeling in Streams, Robert Willis, Donald R. Anderson and John A. Dracup, EE2:Apr 75:245:11246
Surface Shear Waves, D. Howell Peregrine, HY9:Sept 74:1215:10809
Survey of Structural Reanalysis Techniques, Jasbir S. Arora, ST4:Apr 76:783:12056
System Identification of Frames under Seismic Loads, Nestor Distefano and B. Pena-Pardo, EM2:Apr 76:313:12047
Traffic Generation from Land Development Proposals, Satish C. Sharma and Afifi H. Soliman, TE2:May 76:243:12153
Two Dam Break Routing Models, Thomas N. Keefer and Raul S. McQuivey, WW76:Aug 76:201
Two-Dimensional Logit Modal Split Model, Walter Cherwony and Jerome Lutin, TE3:Aug 76:525:12299
Ultimate Strength of Tubular Beam-Columns, A. L. Wagner, W. H. Mueller and Hacik Erzurumlu, Preprint No.2695, Apr 76, 25pp.
Vortex-Excited Oscillations of Elastic Cylinders, Richard A. Skop and Owen M. Griffin, OE75:June 75:535
Waste Generation Models for Solid Waste Collection, Donald Grossman, James F. Hudson and David H. Marks, EE6:Dec 74:1219:11022
Water Quality Models Using the Box-Jenkins Method, Peter M. Huck and Grahame J. Farquhar, EE3:June 74:733:10629

Mathematical Programming

Multilevel Approach to Optimum Structural Design, Uri Kirsch, ST4:Apr 75:955:11259

Mathematics

Convective Transport Finite Element Analog, Keith W. Bedford and James A. Liggett, EM6:Dec 75:803:11807
Optimization of Long-Span Cold-Formed Truss Purlins, Richard T. Douty and James O. Crooker, ST11:Nov 74:2275:10952
Surface Shear Waves, D. Howell Peregrine, HY9:Sept 74:1215:10809

Matrices (Mathematics)

Conditioning of Structural Flexibility Matrix, Charles H. Goodspeed and Michael J. Martin, ST8:Aug 74:1677:10763
Constrained and Shear Moduli for Finite Element, Vincent P. Drnevich, GT5:May 75:459:11319
Dynamic Stiffness Matrices for Viscoelastic Half-Plane Foundations, Anil K. Chopra, P. Chakrabarti and Gautam Dasgupta, EM3:June 76:497:12209
Finite Element Analysis of Wood-Stud Walls, Anton Polensek, ST7:July 76:1317:12234
Frame Interaction in Nonorthogonal Grids, Stephen Chriss, ST4:Apr 76:739:12031
Large-Scale Estuarine Water Quality Matrix Model, Bhaskara R. Penumalli, Robert H. Flake and E. Gus Fruh, EE1:Feb 76:191:11946
Linear Structural Analysis of Multistory Buildings, R. Shankaran Nair, ST3:Mar 75:551:11163
Local Unloading in Piecewise-Linear Plasticity, Osvaldo De Donato and Giulio Maier, EM3:June 76:383:12170
Matrix Analysis of Structure-Foundation Interaction, Fukashi Miyahara and John G. Ergatoudis, ST1:Jan 76:251:11836
On the Accuracy of the Solution of Finite Element Equilibrium Equations, Klaus-Jurgen Bathe, NMG:June 76:I-82
Out-of-Plane Vibration of Thick Circular Ring, James Kirkhope, EM2:Apr 76:239:12022

Special Problems Related to Linear Equation Solvers, Christian Meyer, ST4:Apr 75:867:11223
Ultimate Instability of Earthquake Structures, Franklin Y. Cheng and Kenneth B. Oster, ST5:May 76:961:12117

Matrix Methods
Linear Structural Analysis of Multistory Buildings, R. Shankaran Nair, ST3:Mar 75:551:11163
Overall Elastic Stability of Multistory Buildings, R. Shankaran Nair, ST12:Dec 75:2487:11762
Special Problems Related to Linear Equation Solvers, Christian Meyer, ST4:Apr 75:867:11223
Static and Dynamic Flexibility Matrix for a Semi-Infinite Solid, Tarun R. Naik and Chu-Kia Wang, ST76:Aug 76:644
Statistical Variation of the Compliance of Coal, Richard Henry Atkinson and Hon-Yim Ko, NMG: June 76:I-367

Matrix Methods (Structural)
Continuous Plate Analysis by Finite Panel Method, Richard M. Gutkowski and Chu-Kia Wang, ST3: Mar 76:629:12002
Design of Hipped Hypar Shells, Ahmed Shaaban and Milo S. Ketchum, ST11:Nov 76:2151:12543
Elastic Analysis of Rectangular Box Girders by Finite Element Method, Cetin Yilmaz and Ben T. Yen, ST76:Aug 76:1023
Frame Interaction in Nonorthogonal Grids, Stephen Chriss, ST4:Apr 76:739:12031
Incremental Finite Element Matrices, Sundaramoorthy Rajasekaran and David W. Murray, ST12:Dec 73:2423:10226
Large-Deflection Spatial Buckling of Thin Walled Beams and Frames, Zdenek P. Bazant and Mahjoub El Nimeiri, EM6:Dec 73:1259:10247
Node Numbering Optimization in Structural Analysis, Joaquim S.N. Rodrigues, ST2:Feb 75:361: 11117
Pipeline Stress Analysis, Jamal J. Azar, John G. Bomba and Verle G. Randolph, TE1:Feb 75:163: 11122
Sparse Matrix Operations in Finite Element Analysis, Caleb W. McCormick, Preprint No.2765, Sept 76, 20pp.

Mats
Circular Mats under Arbitrary Loading, Ajoy Banerjee and Ziva D. Jankov, ST10:Oct 75:2133: 11637
Design of Large Papermachine Mat Foundation, Anton W. Wegmuller, James H. Woodward and John R. Bayliss, ST1:Jan 76:231:11863
Distribution of Subgrade Reaction Using Substructuring Finite Element Methods, Satyananda Chakrabarti, Nishikant R. Vaidya and Donald E. Shaw, NMG:June 76:I-551

Maximum Probable Flood
Spillway Design for Series of Reservoirs, Catalino B. Cecilio, Brook A. Kraeger and Vefa Yucel, HY10: Oct 74:1329:10851

Meanders
Detrimental Effects of River Channelization, Gary Parker and David Andres, WW76:Aug 76:1248
Effects of Meandering in Alluvial Streams, Yasuo Onishi, Subhash C. Jain and John F. Kennedy, HY7:July 76:899:12248
Flood Routing in Meandering Rivers with Flood Plains, Danny L. Fread, WW76:Aug 76:16
Geomorphic Thresholds: An Approach to River Management, Stanley A. Schumm and R. Michael Beathard, WW76:Aug 76:707
Meandering Thalwegs in Straight Alluvial Channels, V. Miguel Ponce and Khalid Mahmood, WW76: Aug 76:1418
Mechanism for Streamflow Meandering, Michael C. Quick, HY6:June 74:741:10587
Scour Holes in a Wandering Gravel River, Charles R. Neill, WW76:Aug 76:1301

Measurement
Consideration of Other Techniques, Robert V. Whitman, STN75:Dec 75:II-257
Procedural Errors in Alluvial Channel Measurements, Tariq Masood, Khalid Mahmood and M. M. Siddiqui, WW76:Aug 76:591

Measuring Instruments
Characteristics of Proportional Weirs, D. Chandrasekaran and Nagar S. Lakshmana Rao, HY11:Nov 76:1677:12560
Comparison of Single-Point Injections in Pipe Flow, Ahmed M. Ger and Edward R. Holley, HY6:June 76:731:12172
Electro-Optical Short-Range Surveying Instruments, Narendra K. Saxena, SU1:Oct 75:137:11630
Float Calibration in Intergrated-Float Techniques, Peter H. John, F. Allan Johnson and Peter Sutcliffe, HY8:Aug 76:1071:12308
Guidance for Load Tests of Buildings, Neal FitzSimons and Anatole Longinow, ST7:July 75: 1367:11431
Land Surveying Research: 1965-1975, John A. Dearinger, SU1:Oct 75:51:11649
Nearshore Wave Direction Gage, William R. James and Robert J. Hallermeier, WW4:Nov 76:379:12552
New Diver-Operated Bedload Sampler, Dennis G. Waslenchuk, HY6:June 76:747:12179
Relationship of Soil Moisture to the Dielectric Property, Ernest T. Selig and Sundru Mansukhani, GT8:Aug 75:755:11517
Wall Shear Measurment in Sand-Water Mixture Flows, Oner Yucel and Walter H. Graf, HY7:July 75:947:11453

Mechanical Equipment
Survey of Nozzle Piping Reaction Criteria for Mechanical Equipment, Richard A. Meyer, STN75: Dec 75:II-283

Mechanics
Micromechanics Model for Creep of Anisotropic Clay, Zdenek P. Bazant, I. Kutay Ozaydin and Raymond J. Krizek, EM1:Feb 75:57:11138
Review of Selected Topics in Finite Element Analysis, Robert D. Cook, ST76:Aug 76:535

Membranes
Analytical Solutions for Pretensioned Cable Nets, H. Max Irvine, EM1:Feb 76:43:11908
Doubled-Curved Element for Mooney-Rivlin Membranes, John W. Leonard and Vijay K. Verma, EM4:Aug 76:625:12333
Dynamic Response of Membranes with Finite Elements, Steven E. Benzley and Samuel W. Key, EM3:June 76:447:12217
Membrane Solutions for Shells with Edge Constraint, Charles R. Steele, EM3:June 74:497:10605
Nonlinear Analysis of Reticulated Space Trusses, Dharapuram S. Jagannathan, Howard I. Epstein and Paul P. Christiano, ST12:Dec 75:2641:11799
Parametric Resonance of Suspension Roofs in Wind, Haruo Kunieda, EM1:Feb 76:59:11899
Shear Strength of Two-Way Bridge Slabs, Barrington deV. Batchelor and Ian R. Tissington, ST12:Dec 76:2315:12604
Structural Economy of Certain Scalloped Shells, Ravindra K. Vyas and Sang Ho Do, ST76:Aug 76: 205
Trapezoidally Corrugated Plates in Shear, M. Iqbal Hussain and Charles Libove, ST5:May 76:1109: 12159

Memoirs of Deceased Members
See name of member in Name Index

Mesh Reinforcement
Ferrocement—Material Behavior in Flexure, Colin D. Johnston and Dallas N. Mowat, ST10:Oct 74:2053: 10878

Metal Containing Organic Compounds
Chemical Models for Metals in Coastal Environments, J. J. Morgan and T. H. Sibley, OE75:June 75:1332

Metal Finishing
PL 92-500 to Cost Metal Finishing Industry $45 Billion, Eugene E. Dallaire, CE:Sept 76:84

Metals
Analysis of Sandwich Panels with Formed Faces, John A. Hartsock and Ken P. Chong, ST4:Apr 76: 803:12058
Axial Compression of Formed-Faced Sandwich Panels, Ken P. Chong, Pei-Chung Liu and Kjell Oistein Engen, Preprint No.2807, Sept 76, 22pp.
Axial Hysteretic Behavior of Steel Members, Addison B. Higginbotham and Robert D. Hanson, ST7:July 76:1365:12245
Behavior of Fabricated Tubular Columns Under Biaxial Bending, Wai F. Chen and D. A. Ross, Preprint No.2659, Apr 76, 21pp.
Buckling Formulas for Corrugated Metal Shear Diaphragms, John T. Easley, ST7:July 75:1403: 11429
Evaluation Strategies of Metal Pollution in Oceans, Kenneth Y. Chen and R. Addis Lockwood, EE2: Apr 76:347:12023
Light-Gage Steel Bolted Connections without Washers, Ken P. Chong and Robert B. Matlock, ST7:July 75:1381:11433
Literature Surveys of Cold-Formed Structures, Ken P. Chong, Chmn., Preprint No.2807, Sept 76, 59pp.
A Model for Trace Metals from Marine Outfalls, T. J. Hendricks, OE75:June 75:1353
Removal of Heavy Metals from Industrial Effluents, Jim V. Rouse, EE5:Oct 76:929:12447
A Study to Predict the Release of Metals from Hydraulically Dredged Material, William R. Gee, Robert W. George, John P. Hewitt and Kenneth B. Kim, WW76:Aug 76:492
Tests of Welded Steel Beam-to-Column Moment Connections, John Parfitt, Jr. and Wai F. Chen, ST1:Jan 76:189:11854
Trace Metals in Open Water Disposal of Dredged Material, Kenneth Y. Chen, James C.S. Lu and Amancio Z. Sycip, WW4:Nov 76:443:12546

Meteorology
Mean Speed Profiles of Hurricane Winds, Emil Simiu, V. C. Patel and John F. Nash, EM2:Apr 76: 265:12044
Measured Versus Predicted Air Quality Near Highways, Terry L. Miller and Kenneth E. Noll, EE3:June 76:627:12195
Stochastic Considerations in Thunderstorm Modeling, Ross B. Corotis, HY7:July 76:865:12231
Thermodynamic Models of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:1:11829

Methodology
Methodology for Sedimentation and Water Quality Modelling at the Humber River Mouth, Michael R. Garrett, A. Harrington, Nicholas Kouwen, A. F. Roake and Paul E. Wisner, WW76:Aug 76:650
Problems in Performing Environmental Assessments, Kenneth L. Dickson, David W. Kern, William F. Ruska and John Cairns, Jr., HY7:July 75:965:11463
Propensity of Statewide Multimodel Transportation, William D. Klink and Jason C. Yu, TE4:Nov 75: 639:11710
Two Centuries of Water Planning: A Review of the Development of Methodology, Ray K. Linsley, Preprint No.2754, Sept 76, 10pp.

Metric System
Australian Metrication and the Engineer, Carter H. Harrison, Jr., EI2:Apr 76:199:12088
Civil Engineering Calculations Using SI Units, R. Ernest Leffel, EI1:Jan 76:99:11875
Metrication — An Australian Non-Event, Carter H. Harrison, Jr., CE:Oct 76:51
Metrication—SI in America, Cornelius Wandmacher, EI1:Jan 75:25:11073

Michigan
Carpools at Large Suburban Technical Center, Robert Herman and Tenny Lam, TE2:May 75:311:11332
Energy Conservation in Existing Buildings, Kneeland A. Godfrey, Jr., CE:Sept 75:79
Largest and Lightest Fabric Roof to Date, David H. Geiger, CE:Nov 75:82
Phosphorus Model of Muskegon Wastewater System, Carl G. Enfield and Lowell E. Leach, EE6:Dec 75: 911:11775

Microclimatology
Micro-Climate Control of Deciduous Fruit Production with Overhead Sprinklers, Richard E. Griffin, IR76:July 76:278

Micrometeorology
Mean Speed Profiles of Hurricane Winds, Emil Simiu, V. C. Patel and John F. Nash, EM2:Apr 76: 265:12044

Microseisms
Acoustic Emission Behavior of Granular Soils, Robert M. Koerner, Arthur E. Lord, Jr., W. Martin McCabe and John W. Curran, GT7:July 76:761: 12239

Military Medicine
A New Generation of Military Hospitals, Vernon McKenzie and Roy D. Lemons, EFAN:Dec 74:108
Summary for Session III—Health Delivery Systems, Jack L. Mahan, Jr., EFAN:Dec 74:252

Mine Drainage
Operation Scarlift — Mine Drainage Abatement, Clifford H. McConnell, Donald E. Fowler and Andrew E. Friedrich, Preprint No.2770, Sept 76, 30pp.

Minimum Weight Design
Frame Optimization Including Frequency Constraints, J. Shamie and Lucien A. Schmit, Jr., ST1:Jan 75:283:11075
Least-Weight Frameworks for Loads Across Span, Richard E. McConnel, EM5:Oct 74:885:10872
Minimum Cost Versus Minimum Weight of Prestressed Slabs, Antoine E. Naaman, ST7:July 76: 1493:12268
Minimum Weights for Circular Tube Cantilever Beams, Howard I. Epstein and Jasim M. Alsaigh, TN: ST1:Jan 76:318:11821
Multistage Optimization of Structures, Lawrence A. Twisdale and Narbey Khachaturian, ST5:May 75: 1005:11297
Optimal Slabs and Grillages of Constrained Geometry, George I.N. Rozvany, Chinappa Gangadharaiah and Robin D. Hill, EM6:Dec 75: 755:11797
Structural Economy of Certain Scalloped Shells, Ravindra K. Vyas and Sang Ho Do, ST76:Aug 76: 205
Variable Energy Ratio Method for Structural Design, James W. Gorzynski and William A. Thornton, ST4:Apr 75:973:11266
Weight Optimization of Plane Trusses, Samuel L. Lipson and Krishna M. Agrawal, ST5:May 74:865: 10521

Mining
Finite Element Analysis of Cement Fill Exposures, John L. Meek and R. W. Kirkby, NMG:June 76:II-901
Half a Century Progress in Soft Ground Tunneling, George A. Fox and Louis E. Nicolau, CO4:Dec 76: 637:12622
Subsurface Environment—Private Property or Public Domain?, William R. Walker and William E. Cox, HY11:Nov 74:1699:10958
Three-Dimensional FE Analysis of a Room and Pillar Coal Mine (A Comparison with Experiment), Robert T. Langland, NMG:June 76:II-802

Minnesota
Nicollet Avenue Case Study, Rodney E. Engelen, EFAN12:Dec 74:231
Nicollet Avenue Case Study, Rodney E. Engelen, Preprint No.2672, Apr 76, 14pp.
Reporter's Summary of Discussions for Session V — Center City Malls, Jack L. Mahan, Jr., EFAN:Dec 74:278
Skyways in Minneapolis/St. Paul: Prototypes for the Nation?, C. Todd Heglund and Richard C. Podolske, BP75:Dec 75:482
Summary for Session V—Case Study of a Central City Mall, Rodney E. Engelen, EFAN:Dec 74:275

Minority Groups
Affirmative Action Toward Equal Opportunity, Benito A. Sinclair, CE:Feb 75:69
ASCE Local Level Public Service Actions Have Big Impact, Virginia Fairweather, CE:June 75:51
ASCE Minority Group Counseling Under Way, Virginia Fairweather, CE:Aug 75:54
Competitive Alternative to Minority Quotas/Goals, Jerome R. Butler, Jr. and Doug Hunt, CE:Sept 75: 104
The Engineering and Minority Community in Symbiosis, Sol E. Cooper, EI2:Apr 76:217:12078
Inequities in Minority Engineer Education, Oswald Rendon-Herrero, EI4:Oct 75:499:11666
Method for Minority Contractor Participation, Ariel E. Morelli, CO3:Sept 76:449:12373
Recruiting, Scholarship and Work Programs Involving Women and Minority Engineering Students at New Mexico State University, John W. Hernandez and Roger M. Zimmerman, Preprint No.2796, Sept 76, 10pp.
Statement of Affirmative Action Principles, Benito A. Sinclair, EI3:July 74:183:10688
Success Model for Minority Engineering Programs, Norman J. Johnson and E. Louis Overstreet, EI1: Jan 75:67:11084
Unique Team Effort on Washington Subway Project, Delon Hampton and David Novick, EI1:Jan 76: 129:11872

Missiles
Determination of the Missile Load for Steel Columns of a Nuclear Power Plant Structure, Zin-Tsai Shi, STN75:Dec 75:II-29
Drag Forces on Tornado Borne Missiles, James F. Costello and Willy Z. Sadeh, STN75:Dec 75:II-21
Missile Penetration, Chang-ning Sun, Edwin G. Burdette and Robert O. Barnett, TN: ST5:May 76: 1141:12128
Tornado-Borne Missile Speeds, James F. Costello, Emil Simiu and Martin R. Cordes, Preprint No.2739, Sept 76, 29pp.
Window Glass Failures in Windstorms, Joseph E. Minor and W. Lynn Beason, ST1:Jan 76:147:11834

Mississippi
Economic Evaluation Techniques for Bicycle-Pedestrian Systems: A Case Study, Jack Dorman and Michael Everett, BP75:Dec 75:454
A Study of the Effects of Maintenance Dredging on Selected Ecological Parameters in the Gulfport Ship Channel, Gulfport, Mississippi, Joseph W. Markey and Hugh D. Putnam, DIEE:Jan 76:821

Mississippi River
Dispersion—Mississippi River Below Baton Rouge, La., Raul S. McQuivey and Thomas N. Keefer, HY10:Oct 76:1425:12490
A Geomorphic Study of Pool 25 in the Upper Mississippi River, Michael A. Stevens, Stanley A. Schumm and Daryl B. Simons, WW76:Aug 76:1655
The Great River Study — A New Perspective in River Management, William R. Pearson and Dennis E. Cin, WW76:Aug 76:536
Marseilles Lock Rehabilitation: Illinois Waterway, James P. Jones and Ralph E. Houck, WW76:Aug 76:249
Mississippi River Dikes and Stage-Discharge Relations, Jerome A. Westphal, Paul R. Munger and Clifford D. Muir, WW76:Aug 76:1383
Mississippi River Regime Analysis, Wallace H. Walters, Jr., WW76:Aug 76:730
The Port of New Orleans in the 18th Century — The Formative Years, Herbert R. Haar, Jr., Preprint No.2783, Sept 76, 15pp.
Remote Sensing of Mississippi River Characteristics, James F. Ruff, Morris M. Skinner, Brien R. Winkley, Daryl B. Simons and Dennis E. Dorratcague, WW2:May 76:189:12150
Response of the Mississippi River to the Cutoffs, Brien R. Winkley, WW76:Aug 76:1267
Roughness Characteristics of the Lower Mississippi, Lamont G. Robbins, WW76:Aug 76:1209
Sedimentation Rates in the Upper Mississippi River, J. Roger McHenry, Jerry C. Ritchie and John Verdon, WW76:Aug 76:1339
Transplanting Maritime Plants to Dredged Material in Mississippi Waters, Lionel H. Eleuterius and Hugh A. McClellan, DIEE:Jan 76:9:0

Missouri
Comparision of Construction Labor Agreements, Neal B.H. Benjamin and Arthur W. Young, CO1: Mar 75:183:11180
Horizontal Control in Kansas City by State Plane Coordinates, Don D. Hurlbert and J. Douglas McDonald, SU1:Dec 76:9:12598
Preparation of Surveying Safety Manual for Missouri, Ward R. Malisch and Arthur W. Jacobs, SU1:Oct 75:129:11656
Responsibility and Liability of Public and Private Interests on Dams, Jerry Phelan, EFRLD:Sept 75: 63
Water Quality Management for Metropolitan Kansas City, O. John Schmidt, EE6:Dec 75:935:11784

Missouri River
Missouri River Computerized Data Bank, Glendon T. Stevens, Jr. and Bob Pierce, WW76:Aug 76:725
Missouri River Stage-Discharge Shift, A. D. Berryman, Howard E. Christian and Everett V. Richardson, WW76:Aug 76:1350
Notching River Training Structures: Missouri River, Thomas D. Burke, WW76:Aug 76:1647
Sediment Control at Streamside Power Plants, Gary L. Lewis and Ralph R. Marlette, WW76:Aug 76: 1592

Mixing
Applications of Mixing Experiments to Estuaries, Robert R. Long, OE75:June 75:1400
Buoyant Forced-Plumes in Cross Flow, Vincent H. Chu and Michael B. Goldberg, HY9:Sept 74:1203: 10805
Diffusion and Mixing Processes of an Ocean (Abstract), Abhimanyu Swain, Harold D. Palmer and Kent T.S. Tzou, OE75:June 75:1436
Effect of Wind Stress on Stratified Deep Lake, Niels-Erik Ottesen Hansen, HY8:Aug 75:1037:11484
Entrainment and Drag Forces of Deflected Jets, Daniel T.-L. Chan, Jung-Tai Lin and John F. Kennedy, HY5:May 76:615:12141
Optimizing Flocculator Power Input, Rafael Andreu-Villegas and Raymond D. Letterman, EE2:Apr 76: 251:12032
Prediction of Mixing Lengths for River Flow Gaging, Peter R.B. Ward, HY7:July 73:1069:9856
Role of Eddy Diffusivity in Thermocline Formation, Brian Henderson-Sellers, EE3:June 76:517:12174

Mobility
Case Study of Carless Mobility Constraints, K. C. Koutsopoulos and Vasant H. Surti, TE4:Nov 76: 745:12566
Factors Affecting Liquefaction and Cyclic Mobility, Gonzalo Castro Salas and Steve J. Poulos, Preprint No.2752, Sept 76, 34pp.

Mobilizing
Engineering Services for Construction, Altaf Hussain, CO3:Sept 74:273:10787

Modal Balance
Modal Control of Multistory Structures, Charlesworth R. Martin and Tsu T. Soong, EM4: Aug 76:613:12321

Modal Choice
Modal Analysis for Building-Soil Interaction, Jacobo Bielak, EM5:Oct 76:771:12451
Mode Choice Estimation for Small Areas, Arun Chatterjee and Kumares C. Sinha, TE2:May 75: 265:11303

Modal Split
Aggregate and Disaggregate Travel Demand Models, Arnim H. Meyburg and Peter R. Stopher, TE2:May 75:237:11299
Airport Choice: An Empirical Study, Robert E. Skinner, Jr., TE4:Nov 76:871:12554
Bicycles and Traffic, Harold C. Munn, TE4:Nov 75: 753:11729
Computer-Aided Design of Urban Transit Systems, Jerry B. Schneider, Claus D. Gehner, Dennis Porter and James Clark, TE4:Nov 74:943:10936
Demand Model for Bus Network Design, Jende Hsu and Vasant H. Surti, TE3:Aug 76:451:12309
Entropy Model and Intercity Modal Split in the UK, Gerald R. Leake and John R. Underwood, TE2: May 76:215:12110

Modal Split Technique
Two-Dimensional Logit Modal Split Model, Walter Cherwony and Jerome Lutin, TE3:Aug 76:525: 12299

Mode (Statistics)
Mode Choice Estimation for Small Areas, Arun Chatterjee and Kumares C. Sinha, TE2:May 75: 265:11303
Nonconforming Finite Element Analysis of Shells, Chang-Koon Choi and William C. Schnobrich, EM4:Aug 75:447:11504

Models
Applications of Photoelasticity to Structural Analysis, J. F. Jullien, R. Duhau and J. C. Cubaud, EM5:Oct 76:867:12486
Centrifugal Modelling of Riverbank Failure, Sam Frydman and D. Huw Beasley, GT5:May 76:395: 12099
Comparison of Three-Dimensional Analysis of Concrete Shear Wall Buildings and Their Actual Behavior, Venkataswamy Ramakrishnan, ST76:Aug 76:95
Concepts of Project Planning and Control, Boyd C. Paulson, Jr., CO1:Mar 76:67:11984
Conceptual RMC/Time Synthesis, Marvin Gates and Amerigo Scarpa, CO2:June 76:307:12181
Convective Model of Longitudinal Dispersion, Raul S. McQuivey and Thomas N. Keefer, HY10:Oct 76:1409:12478
Convective Transport Finite Element Analog, Keith W. Bedford and James A. Liggett, EM6:Dec 75: 803:11807
Coupled Optimization-Simulation Water Quality Model, A. Bruce Bishop and William J. Grenney, EE5:Oct 76:1071:12452
Design Optimization for Biological Filter Models, Harold B. Gotaas and William S. Galler, EE6:Dec 73:831:10191
Development of Analysis Techniques for Deployment, Robert W. Thresher, OE75:June 75: 593
Development of Finite Element Head Injury Model, Theodore A. Shugar and Michael G. Katona, EM3: June 75:223:11367
Ductile Behavior of Coupled Shear Walls, Thomas Paulay and Arumbakkam R. Santhakumar, ST1:Jan 76:93:11852
Economic Measure of Benefits of Transportation, John F. Brotchie, TE1:Feb 76:17:11888
An Effective Stress Model for Liquefaction, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, Preprint No.2752, Sept 76, 30pp.
Elastoplastic Torsion of Anisotropic Bars, Pravit Boonlualohr and Somasundaram Valliappan, EM6: Dec 76:995:12634
Estimation of Wave Spreading Factor and Significant Wave Direction, Nai Kuang Liang, OE75:June 75: 1124
An Investigation of the Effective Width of the Reinforced Concrete T-Beam, Gajanan M. Sabnis and William D. Lord, Preprint No.2746, Sept 76, 30pp.
Land-Based Modeling System for Water Quality Management Studies, Walter M. Grayman, Richard M. Males, William E. Gates and A. W. Hadder, HY5:May 75:567:11327
Large-Scale Estuarine Water Quality Matrix Model, Bhaskara R. Penumalli, Robert H. Flake and E. Gus Fruh, EE1:Feb 76:191:11946
Mean Wind Loading on Rough-Walled Cooling Towers, Cesar Farell, Oktay Guven and Federico Maisch, EM6:Dec 76:1059:12647
Measurements and Evaluation of Building Response to Ground Motion at Various Stages of Construction, Kenneth K. Honda, ST76:Aug 76:403
Methodology for Sedimentation and Water Quality Modelling at the Humber River Mouth, Michael R. Garrett, A. Harrington, Nicholas Kouwen, A. F. Roake and Paul E. Wisner, WW76:Aug 76:650
Modeling of Coastal Dredged Material Disposal, Stuart P. Bowen, DIEE:Jan 76:202
Model of Interactive Buckling of Stiffened Plates, James G.A. Croll, EM5:Oct 75:575:11622
Models of Geological Materials in Ground Shock, Ivan S. Sandler and Melvin L. Baron, NMG:June 76:1-219
Model Studies of Multicell Curved Box-Girder Bridges, Mohammad Aslam and William G. Godden, EM3:June 75:207:11366
Model Study of New Standard Prestressed Concrete Bridge, Barrington deV. Batchelor, T. Ivan Campbell, Douglas W. McEwen and Paul Csagoly, ST9:Sept 76:1789:12417
Model Study of Tunnel Prereinforcement, Gregory E. Korbin and Tor L. Brekke, GT9:Sept 76:895:12415
New Licensing Philosophy Concerning Soil Structure Interaction, Kanwar K. Kapur, STN75:Dec 75:II-238
Nuclear Turbine-Generator Foundation Model Tests, Ish K. Aneja and Brian W. Dimmick, Preprint No.2704, Apr 76, 30pp.
Photoelastic Model of Bridge Cross-Frame Junction, Alex S. Redner and Leonard Pompa, EM4:Aug 76: 659:12347
Planning Air Transport Network in Appalachia, Everett C. Carter and Edward K. Morlok, TE3:Aug 75:569:11499
A Practical Monthly Optimum Operations Model, Dan M. Fults, Lawrence F. Hancock and Glen R. Logan, WR1:Apr 76:63:12063
Reinforced Concrete Hyperbolic Paraboloid Shells, Richard N. White, ST9:Sept 75:1961:11595
River Water Quality: Simulation Models or Optimization Techniques, Swami Marcondes Villela, WW76:Aug 76:305
Roadside Slope Design for Safety, Eugene L. Marquis and Graeme D. Weaver, TE1:Feb 76:61: 11922
Scale Model Study of Los Angeles International Airport, Richard G. Cann, TE3:Aug 75:455:11489
Sediment Control at Streamside Power Plants, Gary L. Lewis and Ralph R. Marlette, WW76:Aug 76: 1592
Sensitivity of Trip Distribution to Subarea Focusing, Nancy L. Nihan and Jacques Lassabliere, TE3:Aug 76:555:12317
Shear Strength of Two-Way Bridge Slabs, Barrington deV. Batchelor and Ian R. Tissington, ST12:Dec 76:2315:12604
Side Friction in Model Retaining-Wall Experiment, Peter L. Bransby and Ian A.A. Smith, GT7:July 75: 615:11447
Similitude in Free-Surface Vortex Formations, Larry L. Daggett and Garbis H. Keulegan, HY11:Nov 74: 1565:10941

Stochastic Analysis of Trickling Filter, Khurshed J. Mistry and David M. Himmelblau, EE3:June 75: 333:11362
Stochastic Considerations in Thunderstorm Modeling, Ross B. Corotis, HY7:July 76:865:12231
A Structural Design Process, James M. Becker, ST76: Aug 76:341
Study of Three-Flight Free-Standing Staircases, Simon F. Ng and Alvar T. Chetty, ST7:July 75: 1419:11434
Theoretical Analysis of Curved Girder Bridges, Terry R. Douglas and Samuel C. Gambrell, Jr., EM5:Oct 74:991:10871
Three-Dimensional Analysis of Hydroelectric Power Station, Prem S. Nigam, Om P. Jain and Mahesh B. Kanchi, PO1:Jan 76:35:11830
Transport Phenomena Applied to Sludge Dewatering, Peter Kos and Donald Dean Adrian, EE6:Dec 75: 947:11781
Use of Crushed Limestone to Neutralize Acid Wastes, Frank H. Pearson and Archie J. McDonnell, EE1:Feb 75:139:11131
Use of Jet Pumps in Marine Waste Disposal, Yerachmiel Argaman, Michael Vajda and Noah Galil, EE5:Oct 75:703:11639
Volume Changes in Models of Jointed Rock, Edwin T. Brown, TN: GT3:Mar 76:273:11953

Model Studies
Model Study of Horizontally Curved Box Girder, Adel R.M. Fam and Carl J. Turkstra, ST5:May 76: 1097:12151
Post-Tensioned Slab Bridges on Isolated Supports, Roger Green, ST1:Jan 75:233:11065
Review of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY11:Nov 75:1405:11693
Spillway Design for Series of Reservoirs, Catalino B. Cecilio, Brook A. Kraeger and Vefa Yucel, HY10: Oct 74:1329:10851
Water Waves Generated by Landslides in Reservoirs, D. Donald Davidson and Bruce L. McCartney, HY12:Dec 75:1489:11791

Model Tests
Large-Scale Model Test of Drilled Pier in Sand, Samuel P. Clemence and William F. Brumund, GT6:June 75:537:11369
Method of Calculating Long-Term Creep Settlements, Harry G. Poulos, Laurence P. de Ambrosis and Edward H. Davis, GT7:July 76:787:12273
Sensitivity of Trip Distribution to Subarea Focusing, Nancy L. Nihan and Jacques Lassabliere, TE3:Aug 76:555:12317
Space Trusses with Brittle-Type Strut Buckling, Lewis C. Schmidt, Peter R. Morgan and John A. Clarkson, ST7:July 76:1479:12274
SPM Model Testing for Proposed U.S. Superports, J. Phil Wilbourn, Preprint No.2685, Apr 76, 20pp.
Three-Dimensional Analysis of Hydroelectric Power Station, Prem S. Nigam, Om P. Jain and Mahesh B. Kanchi, PO1:Jan 76:35:11830
Torsional Response of Piles, Harry G. Poulos, GT10: Oct 75:1019:11629

Modulus of Elasticity
Effective Modulus of Twisted Wire Cables, George A. Costello and James W. Phillips, EM1:Feb 76: 171:11944

Mohr Envelope
Stress-Strain Behavior of Sand, Vijay K. Khosla and Tien H. Wu, GT4:Apr 76:303:12079

Moisseiff Award
Nonlinear Analysis of RC Shells of General Form, Cheng-Shung Lin and Alexander C. Scordelis, ST3: Mar 75:523:11164
1976 Moisseif Award Presented, CE:Oct 76:97

Moisture
Swelling Rock: A Review, Ernest N. Lindner, GT76: Aug 76:141

Moisture Content
Future Advances in Soil Placement and Improvement, J. Richard Bell, Preprint No.2775, Sept 76, 19pp.
The Hydrology of the Upper 12-in. (30-cm) of Well-Drained, Imperfectly Drained, and Poorly Drained Mineral Soil Profiles, Peter S. Chisholm and Robert W. Kirkness, IR76:July 76:193
Load-Induced Strains in Hardened Cement Paste, Leslie J. Parrott and John M. Illston, EM1:Feb 75: 13:11118

Molasses
Yeast Plant Wastewater Treatment, Yeun C. Wu and Chiao F. Kao, EE5:Oct 76:969:12468

Moments
Numerical Analysis of Rigid Pavement Resting over Hookean Subgrade Continuum, Madan G. Arora and Sudarshan K. Khanna, NMG:June 76:I-511

Momentum
Friction Effects on Spatially Varied Open Channel Flows with Increasing Discharge, J. D. Lin, Victor E. Scottron and Hsiang Kuei Soong, WW76:Aug 76:1517
Soil Pressure and Overturning Analyses of Structures Under Three Directional Seismic Loads by Using SRSS Combination, Frank J. Hsiu, STN75:Dec 75: II-331
Spatially Varied Flow in Channel Transitions, David T.Y. Kao and S. Dean Perry, WW76:Aug 76:1551

Momentum Equation
Open-Channel Flow Equations Revisited, Ben Chie Yen, EM5:Oct 73:979:10073
Simulation Accuracies of Gradually Varied Flow, J. Peter Jolly and Vujica Yevjevich, HY7:July 74: 1011:10677

Monitoring
Application of Acoustic Velocity Flowmeters, Cortland C. Lanning and Robert W. Ehrhart, Preprint No.2716, Apr 76, 19pp.
Auburn-Foresthill Bridge Abutment Slope Stability, J. Lawrence Von Thun and Bruce M. Moyes, GT76: Aug 76:333
Design and Management of Air Monitoring Surveys, Terry L. Miller and Kenneth E. Noll, EE4:Aug 76: 821:12344
Dredge-Fill in the Coral Reef Tract of the Northern Florida Keys, George M. Griffin, DIEE:Jan 76:768
Marine Sediment Pollution Study by Electric Conductivity Method, Mian-Chang Wang, David H. Killoy and Vito A. Nacci, Preprint No.2664, Apr 76, 19pp.
River and Cooling Water Temperature Fluctuations, Heinz Stefan and V. Nguyen Chau, HY11:Nov 76: 1613:12514

Monitors
Design and Management of Air Monitoring Surveys, Terry L. Miller and Kenneth E. Noll, EE4:Aug 76: 821:12344

Monopoly
Competition in the Transportation Industry, Dayle M. Clark and James J. Schwarzwalder, TE3:Aug 76:489:12290

Montana
Libby Dam Left Abutment Rock Wedge Stability, James V. Hamel, GT76:Aug 76:361
Water Waves Generated by Landslides in Reservoirs, D. Donald Davidson and Bruce L. McCartney, HY12:Dec 75:1489:11791

Monte Carlo Method
Maximum Response Statistics for Yielding Oscillator, Nilesh C. Chokshi and Loren D. Lutes, EM6:Dec 76:983:12632
Response Analysis of Tall Buildings to Wind Loadings, Rimas Vaicaitis, Masanobu Shinozuka and Masaru Takeno, ST3:Mar 75:585:11194

Simulation of Hydraulic Processes in Open Channels, Chao-Lin Chiu, Hsin-Chi Lin and Kazumasa Mizumura, HY2:Feb 76:185:11905
Structural System Failure Analysis in a High Load Environment, Jon D. Collins, ST76:Aug 76:39

Montmorillonite
Shearing Strength of Kaolinite, Illite, and Montmorillonite, Roy E. Olson, GT11:Nov 74:1215:10947

Monuments
Corner Restoration in Missouri, Norman L. Brown, SU1:Oct 75:101:11658

Moody Resistance Diagrams
Transformation of Moody Diagram, Krishna C. Asthana, HY6:June 74:797:10624

Mooring
Hydrodynamic Forces on Cables Subject to Frequency Varied Motion, Robert W. Haas and Richard F. Dominguez, Preprint No.2728, Apr 76, 26pp.
SEABERTH—A Program for the Calculation of Motions and Mooring Forces, Leonard Sugin and Ludwig H. Seidl, OE75:June 75:650
Six-Degrees-of-Freedom Motions, Moored Ship in Waves, Basil W. Wilson, OE75:June 75:646
SPM Model Testing for Proposed U.S. Superports, J. Phil Wilbourn, Preprint No.2685, Apr 76, 20pp.
Sytems Approach to the Mechanics of Array Cables, Rolf G. Kasper, OE75:June 75:610
Tension Leg Platforms: Design and Performance, Dean A. Kypke and Leonardo Perez y Perez, Preprint No.2698, Apr 76, 30pp.

Moorings
Analysis of Cable Dynamics—State-of-the-Art Summary, John H. Nath, OE75:June 75:623
Dynamic Effects of Ship Passage on Moored Vessels, Shen Wang, WW3:Aug 75:247:11501
Hydrodynamic Forces on Cables Subject to Frequency Varied Motion, Robert W. Haas and Richard F. Dominguez, Preprint No.2728, Apr 76, 26pp.
SEABERTH—A Program for the Calculation of Motions and Mooring Forces, Leonard Sugin and Ludwig H. Seidl, OE75:June 75:650
Six-Degrees-of-Freedom Motions, Moored Ship in Waves, Basil W. Wilson, OE75:June 75:646
Sytems Approach to the Mechanics of Array Cables, Rolf G. Kasper, OE75:June 75:610

Morphology
Impact of Dredging on River System Morphology, Peter F. Lagasse and Daryl B. Simons, WW76:Aug 76:434
Missouri River Stage-Discharge Shift, A. D. Berryman, Howard E. Christian and Everett V. Richardson, WW76:Aug 76:1350
Morphology of Cobble Streams in Small Watersheds, Ruh-Ming Li, Daryl B. Simons and Michael A. Stevens, HY8:Aug 76:1101:12304
Predictions of the Hydraulic and Morphological Changes of the "La Grande Riviere" Lower Reach System, Marcel Frenette and Octave Caron, WW76:Aug 76:1229

Mortars
Ferrocement—Material Behavior in Flexure, Colin D. Johnston and Dallas N. Mowat, ST10:Oct 74:2053:10878

Motion
Applicability of Unit Stream Power Equation, Chih Ted Yang and John B. Stall, HY5:May 76:559:12103
Consideration of Finite Element Representation, H. Bolton Seed, STN75:Dec 75:II-246
The Influence of Water Depth on Ship Motion in Oblique Waves, C. H. Kim, OE75:June 75:653
Parallel Motion of Corrugated Plates, Chang-Yi Wang, TN: EM2:Apr 76:373:12017
Relative Motion of Two Points during an Earthquake, John T. Christian, TN: GT11:Nov 76:1191:12513
Resistance of Masonry Infill Walls to Out-of-Plane Dynamic Motion, Bernard L. Gabrielsen and Kenneth Kaplan, Preprint No.2771, Sept 76, 26pp.
SEABERTH—A Program for the Calculation of Motions and Mooring Forces, Leonard Sugin and Ludwig H. Seidl, OE75:June 75:650
Six-Degrees-of-Freedom Motions, Moored Ship in Waves, Basil W. Wilson, OE75:June 75:646

Motion Effects
Measurements and Evaluation of Building Response to Ground Motion at Various Stages of Construction, Kenneth K. Honda, ST76:Aug 76:403
Resistance of Masonry Infill Walls to Out-of-Plane Dynamic Motion, Bernard L. Gabrielsen and Kenneth Kaplan, Preprint No.2771, Sept 76, 26pp.

Motion Studies
Fifty Years of Construction Cost-Reducing Analyses, Robert L. Peurifoy, CO2:June 75:299:11371
Six-Degrees-of-Freedom Motions, Moored Ship in Waves, Basil W. Wilson, OE75:June 75:646

Motivation
Changing Responsibilities of the Professional Engineer in Public Works, James L. Ogilvie, EI3:July 76:345:12275
Improving Productivity in Industrial Construction, John D. Borcherding, CO4:Dec 76:599:12595
Job Dissatisfactions in Construction Work, John D. Borcherding and Clarkson H. Oglesby, CO2:May 75:415:11390
Motivation of Construction Workers, Craig S. Hazeltine, CO3:Sept 76:497:12376

Mountain Forests
Low Flow Modeling in Small Steep Watersheds, David S. Bowles and J. Paul Riley, HY9:Sept 76:1225:12405

Mountain Ridges
Interstate Squeezes through River Gorge, CE:June 75:54

Mountains
Interstate Squeezes through River Gorge, CE:June 75:54

Movable Bed Models
Assessment of Galveston Entrance Movable-Bed Model, William H. McAnnaly, Jr. and Joseph V. Letter, Jr., Preprint No.2661, Apr 76, 27pp.
Hans A. Einstein's Contributions in Sedimentation, Hsieh W. Shen, HY5:May 75:469:11290
Movable-Bed Flow Routing in Open Channel and Its Calibration, Chian-Min Wu, WW76:Aug 76:36
Resistance Equation for Alluvial-Channel Flow, Durl E. Burkham and David R. Dawdy, HY10:Oct 76:1479:12462
Sediment Control at Streamside Power Plants, Gary L. Lewis and Ralph R. Marlette, WW76:Aug 76:1592

Moving Sidewalks
Multilane Passenger Conveyors, Edward W. Walbridge, TE3:Aug 75:463:11485

Multidisciplinary Teams
I-70 Glenwood Canyon — Design Concept, Joseph H. Looper, TE2:May 76:201:12138

Multimodal Transportation Systems
Evaluating Multi-Modal Alternatives: San Diego/Los Angeles Corridor Study, Darwin G. Stuart, Preprint No.2666, Apr 76, 29pp.
Propensity of Statewide Multimodel Transportation, William D. Klink and Jason C. Yu, TE4:Nov 75:639:11710

Multiple Purpose Projects
Economic Crisis of the 1930's and Water Resources Planning (Abstract), Marion E. Marts, Preprint No.2754, Sept 76, 2pp.
Multiobjective Planning: Concepts and Methods, A. Bruce Bishop, Mac McKee, T. Ward Morgan and Rangesan Narayanan, WR2:Nov 76:239:12563
Multiobjective Planning: New Directions and Methodology, A. Bruce Bishop, Mac McKee, T. Ward Morgan and Rangesan Narayanan, Preprint No.2715, Apr 76, 26pp.
Operations Models for Central Valley Project, Leonard Becker, William W-G. Yeh, Dan M. Fults and Donald Sparks, WR1:Apr 76:101:12062
Solid Waste Management: Equity Trade-Off Models, Louis A. Fuertes, James F. Hudson and David H. Marks, UP2:Nov 74:155:10913

Multiple Use
The Auto Restricted Zone/Multi-User Vehicle Systems Study: A Status Report, Beth Irons French and William S. Herald, BP75:Dec 75:197

Multiplication
Yield Criterion for Reinforced Concrete Slabs, Satish C. Jain and John B. Kennedy, ST3:Mar 74:631: 10409

Multivariate Analysis
Multivariable Flood Level Frequency Distribution, David L. Strelchuk, HY12:Dec 76:1737:12637

Municipal Engineering
City's Topographic Mapping System Saves Time, Money and is More Accurate, CE:Sept 76:98
Discounted Cash Flow Analysis to Select Equipment, Richard Briller, EE3:June 76:595:12190
Energy Recovery from Refuse—State-of-the- Art, John Payne, EE2:Apr 76:281:12027
A Guide for Municipalities for Bicycle Planning, Carmen W. Daecher, BP75:Dec 75:117
Kingwood: A Non-Assisted Private Suburban Development, Daniel B. Stauffer, Preprint No.2656, Apr 76, 26pp.
Municipal Problems with P.L. 92-500 — Conformance Versus Performance, Arthur F. Vondrick, Preprint No.2645, Apr 76, 15pp.
Peachtree City Path Experience: Conception to Implementation, Edwin R. Koons, BP75:Dec 75: 186
Planning the Successful Pedestrian Mall: The Allentown Mall, Paul W. Zambo, BP75:Dec 75:109
Sewering the City of New York, Martin Lang, Charles Samowitz, Mohan Jethwani and Frederick Novotny, CE:Jan 76:54
Survey Program for Civil Works Projects, William A. Angeloni, SU1:Oct 75:121:11662
Three Towns: Three Different Solutions to Stormwater Control, Charles F. Hemming, CE:Sept 76:65
The Trouble with Municipal Public Works, William E. Fendley, EI2:Apr 76:173:12077
1975 ASCE Salary Survey, Schaefer J. Dixon, Chmn., EI2:Apr 76:225:12090

Municipal Government
Professional Engineers as Elected Local Officials, Kenneth R. Wright and Douglas T. Sovern, EI4: Oct 76:447:12504
Survey Program for Civil Works Projects, William A. Angeloni, SU1:Oct 75:121:11662

Municipalities
City's Topographic Mapping System Saves Time, Money and is More Accurate, CE:Sept 76:98
The Trouble with Municipal Public Works, William E. Fendley, EI2:Apr 76:173:12077

Municipal Wastes
Industrial, Municipal Wastes Combined, Robert E. Hickman and Charles N. Smith, CE:Dec 76:68

Nathan M. Newmark Medal
1976 Nathan M. Newmark Medal Presented to John E. Goldberg, CE:Oct 76:99

National Government
OTA: Mixing Technology and National Goals, Emilio Q. Daddario, CE:Dec 75:78

Natural Frequency
Natural Frequencies of a Turbine Foundation, Chung-Tung Shen and Norman E. Stone, STN75: Dec 75:II-302
Nuclear Turbine-Generator Foundation Model Tests, Ish K. Aneja and Brian W. Dimmick, Preprint No.2704, Apr 76, 30pp.
Structural System Parameter Estimation by Two-Stage Least Squares Method, Will Gersch, George T. Taoka and Robert Liu, EM5:Oct 76:883:12464

Natural Gas
Numerical Treatment of Some Geomechanical Problem Areas in Oil and Natural Gas Production, Jan Geertsma, NMG:June 76:II-759

Natural Resources
Communication Goals for Science and Engineering, S. H. Wittwer, EI2:Apr 76:183:12087
Dredged Material as a Natural Resource, Michael R. Walsh, Preprint No.2714, Apr 76, 19pp.
Dredged Material: Natural Resource or National Nuisance, Jaap de Nekker and Kees d'Angremond, DIEE:Jan 76:866
Evolving National Water Policies, Gary D. Cobb, EI3:July 75:375:11427
Historical Sites and the Construction Engineer, Mario G. Salvadori, CO2:June 76:295:12183
Maintaining Water Quality in Voyageurs National Park, William H. Anderl, Preprint No.2686, Apr 76, 14pp.
National Environmental Policies and the Effect on Productivity Through Regulation, Norman E. Hill, PROD:Aug 76:277
Nation's Capital Faces Critical Water Problems, CE: June 75:58
OTA: Mixing Technology and National Goals, Emilio Q. Daddario, CE:Dec 75:78
Photographic Remote Sensing of Bolinas Lagoon, California, Douglas M. Pirie and Michael J. Murphy, Preprint No.2647, Apr 76, 17pp.
Protection and Enhancement of Fisheries and Wildlife Resources, F. Eugene Hester, IR76:July 76:690
Satellites Helping Solve Some Down-to-Earth Civil Engineering Problems, CE:Aug 75:49
Some Thoughts on Zero Discharge, Paul Fleming, EI2:Apr 76:179:12082
Use of Remote Sensing for Mapping Wetlands, Robert J. Reimold and Rick A. Linthurst, TE2:May 75:189:11293

Natural Use
Architects and Nature: On the Primacy of Man, Eric Hoffer, EFAN:Dec 74:8
Summary for Session II - Human Factors Affecting the Constructed Environment, Kevin E. Coray and Ronald W. Petersen, EFAN:Dec 74:249

Navigable Canals
Construction of the 40-Foot Channel in Columbia River, Robert O. Dodge, WW76:Aug 76:259
Mississippi River Dikes and Stage-Discharge Relations, Jerome A. Westphal, Paul R. Munger and Clifford D. Muir, WW76:Aug 76:1383
Stability Problems for the Navigation Channel in a Tidal River, Egon Giese, WW76:Aug 76:280

Navigable Waters
Regime Studies of the Lower Fraser, Alfred John Tamburi, WW76:Aug 76:1680

Navigation
Arctic Refraction Study, Gerald W. Johnson, SU1: Dec 76:1:12602

Dredging and the Environmental Policy Act of 1969, James H. Bradley, DIEE:Jan 76:39
Dredging and the National Environmental Policy Act of1969, James H. Bradley, Preprint No.2734, Apr 76, 16pp.
Effect of Flow Regulation on Navigation Fuel Costs, Jean-Pierre Granju and Walter O. Wunderlich, WW76:Aug 76:65
A Legal-Historical Analysis of Navigation User Charges, Peter M. Ashton, Catherine Cooper-Ruska and Leonard A. Shabman, WR1:Apr 76:89:12084
Lower Minnesota River — Capacity Study, Amardo J. Romano, WW76:Aug 76:687
Luncheon Remarks at Ocean Engineering III, Robert I. Price, OE75:June 75:1485
Man-Induced Changes of Middle Mississippi River, Michael A. Stevens, Daryl B. Simons and Stanley A. Schumm, WW2:May 75:119:11281
Marine Geodesy — Precise Ocean Surveys, Narendra K. Saxena, SU1:Oct 75:73:11631
The Port of Philadelphia — Past and Present, Clarence F. Wicker, Preprint No.2774, Sept 76, 20pp.
Revival of Inland Navigation in Pakistan, Irshad Ahmad, WW76:Aug 76:84
River-Ice Problems: A State-of-the-Art Survey and Assessment of Research Needs, John F. Kennedy, Cochmn. and George D. Ashton, Cochmn., HY1: Jan 74:1:10281
River Response to Development, Everett V. Richardson and Daryl B. Simons, WW76:Aug 76: 1285
Waters of the United States, William L. Black, DIEE: Jan 76:10

Navigation Dams
Today's Northwest Passage, Richard A. Kaden and Roney A. Heinz, CE:June 76:41

Nebraska
Nebraska Flood-Plain Management Program—Part II, James R. Cook, HY7:July 75:983:11438

Negative Friction
Reducing Negative Friction with Bitumen Slip Layers, Alphonsus I. M. Claessen and Endre Horvat, GT8:Aug 74:925:10764

Neoprenes
Porous Friction Course Solves Airport Hydroplaning Problem, Edward A. Johnson and Thomas D. White, CE:Apr 76:90

Netherlands
Dredged Material: Natural Resource or National Nuisance, Jaap de Nekker and Kees d'Angremond, DIEE:Jan 76:866
Gas Release During Transient Cavitation in Pipes, C. Kranenburg, HY10:Oct 74:1383:10892

Network Analysis
Developments in CPM, PERT, and Network Analysis, Calin Popescu and John D. Borcherding, CO4:Dec 75:769:11763

Network Design
Computer Simulation of Water Distribution Networks, Claude R. Gagnon and Samuel L.S. Jacoby, TE3:Aug 75:553:11515

Networks
History of Geodetic Networks, James R. Plasker, SU1:Dec 76:21:12612
Least Cost Design of Branched Pipe Network System, Arun K. Deb, EE4:Aug 74:821:10711
Optimization of Water Distribution Network Systems, Arun K. Deb, EE4:Aug 76:837:12343
Sensitivity of Trip Distribution to Subarea Focusing, Nancy L. Nihan and Jacques Lassabliere, TE3:Aug 76:555:12317

Neutralization
Limestone Barriers to Neutralize Acidic Streams, Frank H. Pearson and Archie J. McDonnell, EE3: June 75:425:11382

Neutrons
Effects of Irrigation Scheduling and Coordinated Delivery on Irrigation and Drainage Systems, Roy D. Gear, Arnold S. Dransfield and Melvin D. Campbell, Preprint No.2720, Apr 76, 18pp.

New Hampshire
Construction Redesign — Woodstock Rockslide, N.H., Brian K. Fowler, GT76:Aug 76:386

New Jersey
Countywide Land Use Forecasts, Robert E. Heightchew, Jr., UP2:Nov 75:135:11682
Instrumentation for Wave Induced Pore Pressures, James T. Dette, Vahan Tanal and Joseph A. Fischer, OE75:June 75:355
Sediment Transport Study, Offshore, New Jersey, Joseph T. DeAlteris, James R. Roney, Lloyd E. Stahl and Chris Carr, OE75:June 75:225

New Mexico
Recruiting, Scholarship and Work Programs Involving Women and Minority Engineering Students at New Mexico State University, John W. Hernandez and Roger M. Zimmerman, Preprint No.2796, Sept 76, 10pp.

New Towns
New York City's New Town, David I. Ozerkis, CE: Nov 75:68

New York
Apparel-Goods Movement Process, Sam Kahan, Carl M. Berkowitz and Walter H. Kraft, TE3:Aug 76: 507:12298
Concentric Waste-Treatment Plant Saves Land, Sterling G. Brisbin, CE:Feb 76:74
Deposition and Erosion in the Dredge Spoil and Other New York Bight Dumping Areas, George L. Freeland and George F. Merrill, DIEE:Jan 76:936
Determination of Length and Direction of Ocean Outfall Diffuser at Wantagh Sewage Treatment Plant, Nassau County, New York, Wen H. Huang, OE75:June 75:1294
Empire State: Greatest of All Skyscrapers, CE:July 76:65
Engineering the First Mass Transit Tramway, Richard L. Tomasetti and David I. Ozerkis, CE: Nov 75:65
Evaluation of Circulation in Estuaries, Karim A. Abood and Efstathios L. Bourodimos, HY9:Sept 76: 1211:12408
George Waring: Giving Sanitation Status, CE:July 76: 81
Land Use and Water Quality in New York Rivers, Douglas A. Haith, EE1:Feb 76:1:11902
New York City's New Town, David I. Ozerkis, CE: Nov 75:68
New York's Glacial Formation of Varved Silt and Clay, James D. Parsons, GT6:June 76:605:12218
Optimizing Selection of Marine Retaining Walls, Robert C. Johnston, Max Bernheimer and Dominic A. Zarrella, GT12:Dec 76:1209:12624
Optimizing the Selection of Marine Retaining Walls, Robert C. Johnston, Max Bernheimer and Dominic A. Zarrella, Preprint No.2710, Apr 76, 28pp.
Oxygen Depletion Model for Cayuga Lake, J. Denis Newbold and James A. Liggett, EE1:Feb 74:41: 10346
Pilot Plant Program — Treatment of NYC Water Supply, George P. Fulton and Edward A. Bryant, CE:June 76:52
Polymer-Concrete Passes Toughest Test, Austin H. Emery and Meyer Steinberg, CE:June 76:61
Practical Proposal for Restoring Manhattan's West Side Highway, Robert Moses, CE:Nov 75:49
Salt Storage and Runoff in Urban Watershed, Richard H. Hawkins, EE4:Aug 76:737:12292

Sewering the City of New York, Martin Lang, Charles Samowitz, Mohan Jethwani and Frederick Novotny, CE:Jan 76:54
Water-Temperature Changes Downstream from a Major Reservoir at Cannonsville, N.Y., Robert E. Fish and Nobuhiro Yotsukura, IR76:July 76:481

Nile River Valley
River Regime with Special Reference to River Nile, Mohamed Bakr Khalil, HY1:Jan 75:135:11072

Nitrates
Irrigation Management Decisions for Minimizing Nitrate Leaching, A. S. Dylla, D. R. Timmons and Hollis Shull, IR76:July 76:168

Nitrification
Fate of Nitrogen in Sewage Effluent Applied to Soil, J. Clarence Lance, IR3:Sept 75:131:11570
Nitrifying Organism Concentration and Activity, Embar G. Srinath, Raymond C. Loehr and Tata B.S. Prakasam, EE2:Apr 76:449:12041

Nitrogen
Nonpoint Source Pollution from Agricultural Runoff, Douglas A. Haith and John V. Dougherty, EE5:Oct 76:1055:12481
Real Time Model of the Nitrogen Cycle in an Estuary, Tavit O. Najarian and Donald R.F. Harleman, Preprint No.2676, Apr 76, 30pp.
Role of Nitrogen in Activated Sludge Process, Yeun C. Wu, EE5:Oct 76:12454

Nitrogen Compounds
Optimal Control of Nitrogen Losses from Land Disposal Areas, Douglas A. Haith, EE6:Dec 73: 923:10200

Nitrogen Cycle
Real Time Model of the Nitrogen Cycle in an Estuary, Tavit O. Najarian and Donald R.F. Harleman, Preprint No.2676, Apr 76, 30pp.

Nitrogen Oxides
Air Pollution Impact of Railroad Electrification, Hal B.H. Cooper, Jr., Hoy A. Richards and Aaron T.B. Lam, EE4:Aug 76:723:12312
NO_x Emissions from Stationary Combustion Sources, James J. Stukel, Chmn., EE3:June 74:641:10581

Nodes
Laplacian-Isoparametric Grid Generation Scheme, Leonard R. Herrmann, EM5:Oct 76:749:12456
Node Numbering Optimization in Structural Analysis, Joaquim S.N. Rodrigues, ST2:Feb 75:361: 11117

Noise
Acoustic Emission Behavior of Granular Soils, Robert M. Koerner, Arthur E. Lord, Jr., W. Martin McCabe and John W. Curran, GT7:July 76:761: 12239
Concrete Walls for Highway Noise Reduction, Edwin C. Lokken, TE4:Nov 76:637:12534
Vibration Measurements of Steel Transit Structures, Marshall L. Silver and Thomas Venema, ST9:Sept 75:1855:11557

Noise Control
Concrete Walls for Highway Noise Reduction, Edwin C. Lokken, TE4:Nov 76:637:12534
Noise in the Urban Environment, Felipe U. Derteano, UP2:Nov 75:183:11688

Noise Pollution
Noise in the Urban Environment, Felipe U. Derteano, UP2:Nov 75:183:11688

Noise Reduction
Concrete Walls for Highway Noise Reduction, Edwin C. Lokken, TE4:Nov 76:637:12534

Nomographs
Estimating Stock Water Use in Rural Water Systems, Robert S. Schulz and T. Al Austin, HY1:Jan 76:15: 11843
Generalized Nomographic Solution of Hooghoudt Equations, John G. Sakkas, IR1:Mar 75:21:11182

Noncohesive Soils
Incremental Stress-Strain Relationship for Cohesionless Soil, F. Darve, S. Labanieh and R. Chambon, NMG:June 76:I-264

Nonlinear Differential Equations
Nonlinear Analysis of Earth Structures, W. D. Liam Finn and Ronald Ian S. Miller, NMG:June 76:I-194
Nonlinear Analysis of Reticulated Space Trusses, Dharapuram S. Jagannathan, Howard I. Epstein and Paul P. Christiano, ST12:Dec 75:2641:11799
Subsurface Drainage Solutions by Galerkin's Method, Purushottam Dass and Hubert J. Morel-Seytoux, IR1:Mar 74:1:10397

Nonlinear Programming
Nonlinear Analysis of Earth Structures, W. D. Liam Finn and Ronald Ian S. Miller, NMG:June 76:I-194

Nonlinear Systems
Analysis of a Test Embankment Considering the Anisotropy of the Soil, Hakan Stille, A. Fredriksson and Bengt B. Broms, NMG:June 76:II-611
Analysis of Buried Pipe Under Embankment, Shamsher Prakash, Gyan C. Nayak and R. Gupta, NMG:June 76:II-886
Approximate Method for Nonlinear Random Vibration, Yi-Kwei Wen, EM4:Aug 75:389:11500
Design Criteria for Anchor Cables and Bolting in Underground Openings, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:II-859
Efficient Design-Analysis of Physically Nonlinear Trusses, Edwin C. Rossow, David L.C. Lo and Shih-Lung Chu, ST4:Apr 75:839:11257
Energy Approach to Inelastic Cable-Structure Analysis, Giulio Maier and Roberto Contro, EM5: Oct 75:531:11614
Finite Element Analysis of Stresses and Movements in Excavations, Hiromitsu Izumi, Katsumi Kamemura and Seiichi Sato, NMG:June 76:II-701
Finite Element Technology for Predicting Nonlinear Behavior of Structures, Robert J. Melosh and F. Hatt, Preprint No.2765, Sept 76, 20pp.
Generalisation of Sequential Nonlinear Analysis: A Study of Rockfill Dam with Joint Elements, Heramb D. Sharma, Gyan C. Nayak and J. B. Maheshwari, NMG:June 76:II-662
Local Unloading in Piecewise-Linear Plasticity, Osvaldo De Donato and Giulio Maier, EM3:June 76:383:12170
Nonlinear Analysis of Earth Structures, W. D. Liam Finn and Ronald Ian S. Miller, NMG:June 76:I-194
Nonlinear Analysis of Rail Track and Support, Otto J. Svec and Gerald P. Raymond, NMG:June 76:I-540
Nonlinear Behavior in Soil-Structure Interaction, Eduardo Kausel, Jose M. Roesset and John T. Christian, GT11:Nov 76:1159:12579
Nonlinear Characterization and Analysis of Sand, Hon-Yim Ko and Raymond M. Masson, NMG: June 76:I-294
Non-Linear Flow and Deformation Analysis of Consolidated Problems, Roland W. Lewis, G. W. Roberts and Olgierd C. Zienkiewicz, NMG:June 76:II-1106
Nonlinear Wave Forces on Halfcylinder and Hemisphere, Subrata K. Chakrabarti and Robert A. Naftzger, WW3:Aug 74:189:10710
Numerical-Perturbation Methods in Numerical Mechanics, Ali Hasan Nayfeh, NMG:June 76:I-168
Predicting Estuarine Salinity from River Inflows, James A. Harder, Preprint No.2674, Apr 76, 23pp.
Seismic Response of Pipelines on Friction Supports, James C. Anderson and Anand K. Singh, EM2:Apr 76:275:12043

Session 6: Soil Structure Interaction — Nonlinear Effects, Eduardo Kausel, STN75:Dec 75:II-223
Simple Nonlinear Model for Flood Estimation, Russell G. Mein, Eric M. Laurenson and Thomas A. McMahon, HY11:Nov 74:1507:10933
System Identification of Frames under Seismic Loads, Nestor Distefano and B. Pena-Pardo, EM2: Apr 76:313:12047

Nonuniform Flow
Evaluation of Nonuniformity in Irrigation and Yield, Ivan Varlev, IR1:Mar 76:149:12003

Norman Medal
New Design Procedure for Stability of Soft Clays, Charles C. Ladd and Roger Foott, GT7:July 74: 763:10664
1976 Norman Medal Presented to Roger Foott and Charles C. Ladd, CE:Oct 76:96

North Carolina
Channel Entrance Response to Jetty Construction, J. M. Kieslich and Curtis Mason, OE75:June 75:689
Circulation and Surge Modeling in Pamlico Sound, N.C., Michael Amein and Damodar S. Airan, Preprint No.2665, Apr 76, 29pp.
Model of Hurricane Tide in Cape Fear Estuary, James E. Overland and Vance A. Myers, WW4: Nov 76:407:12549
Sediment Movement in Tubbs Inlet, North Carolina, Jerry L. Machemehl, Robert P. Masterson, Jr. and Victor V. Cavaroc, Jr., OE75:June 75:313
A State Government View of Energy Complexes, James E. Harrington, EFEEC:Aug 75:59

North Dakota
Emergency Assistance on Flood Damage in North Dakota Under Section 216 of the Flood Control Act of 1950, A. Richard Moum, IR76:July 76:76

Norway
Correlations Between Vane Shear Strength and Cone Resistance in Some Norwegian Soft Clays, Tom Lunne, GT75:June 75:II-161

Nozzles
Survey of Nozzle Piping Reaction Criteria for Mechanical Equipment, Richard A. Meyer, STN75: Dec 75:II-283

Nuclear Electric Power Generation
Construction of FFTF Containment Vessel and Lock, Robert N. Lebre, CO2:June 76:325:12177
Construction of Post-Tensioned PWR Containments, Kurtz L. Paulson, CO1:Mar 76:213:11981
Design Spectra for Nuclear Power Plants, Ricardo A. Guzman and Paul C. Jennings, PO2:Nov 76:165: 12521
Fort St. Vrain PCRV Bottom Head Construction, Hughes M.G. Nerses and Clyde B. Tatum, CO2: June 75:391:11394
Heat Disposal in Water Environment, Donald R.F. Harleman, HY9:Sept 75:1117:11585
Liner Anchorage Analysis for Nuclear Containments, Ted L. Winstead, Edwin G. Burdette and Daryl R. Armentrout, ST10:Oct 75:2103:11635
The Nuclear Energy Center Impact on Land Use, Frank A. Jenkins, EFEEC:Aug 75:73
Seismic Qualification — Philosophy and Methods, Charles W. Roberts and George D. Shipway, PO1: Jan 76:113:11822
Test Method for Seismic Qualification of Equipment, Michael de Estrada, PO1:July 74:97:10656

Nuclear Energy
Liner Anchorage Tests, Edwin G. Burdette and Larry W. Rogers, ST7:July 75:1455:11432
Philadelphia—Civil Engineering News Roundup, CE: June 76:60

Nuclear Explosions
A Comparative Study of Structural Response to Explosion-Induced Ground Motions, Neal FitzSimons, Chmn., SREGM:75, 138pp.
In-Situ Pore Presure Measurements at Rio Blanco, John R. Banister, Robert Pyke, D. Maxwell Ellett and Leon Winters, GT10:Oct 76:1073:12471

Nuclear Fuel Assemblies
The Impact of Nuclear Fuel Cycle Centers on Shipping Special Nuclear Materials and Wastes, J. O. Blomeke, EFEEC:Aug 75:181

Nuclear Fuel Cycles
The Impact of Nuclear Fuel Cycle Centers on Shipping Special Nuclear Materials and Wastes, J. O. Blomeke, EFEEC:Aug 75:181

Nuclear Fuels
Air Pollution Factors in the Planning of Energy Complexes, Maynard E. Smith, EFEEC:Aug 75:211

Nuclear Materials Management
The Impact of Nuclear Fuel Cycle Centers on Shipping Special Nuclear Materials and Wastes, J. O. Blomeke, EFEEC:Aug 75:181

Nuclear Power
"Geological Hazards," by B.A. Bolt, W.L. Horn, G.A. Macdonald, and R.F. Scott. (Book Review), Richard L. Meehan, CE:May 76:39
The Impact of Nuclear Fuel Cycle Centers on Shipping Special Nuclear Materials and Wastes, J. O. Blomeke, EFEEC:Aug 75:181
A Structural Design Decision Methodology for Nuclear Power Plants, Samad Zendehrouh and Masanobu Shinozuka, ST76:Aug 76:517
Unreliability of Qualifying Active Mechanical Equipment by Testing Only, Ahmed E. Meligi, STN75:Dec 75:II-11

Nuclear Power Plant Location
"Geological Hazards," by B.A. Bolt, W.L. Horn, G.A. Macdonald, and R.F. Scott. (Book Review), Richard L. Meehan, CE:May 76:39

Nuclear Power Plants
Analysis of Torispherical Pressure Vessels, Ganapathy V. Ranjan and Charles R. Steele, EM4: Aug 76:643:12335
Artificial Island Engineering, Jan Malan Jordaan, Jr., OE75:June 75:777
ASCE and Nuclear Power Plants, Arthur J. Fox, Jr., EI3:July 76:279:12259
ASCE Tackles Standards, CE:Aug 76:64
Candidate Industries and General Island Locations, Daniel M. Bragg, OE75:June 75:751
Choice and Application of Computer Programs in Pipe Whip Analysis, Vera F. Dunder and Klaus-Jurgen Bathe, STN75:Dec 75:II-379
Circular Mats under Arbitrary Loading, Ajoy Banerjee and Ziva D. Jankov, ST10:Oct 75:2133: 11637
Design Basis Flooding at Offshore Reactor Sites, Ronald M. Noble, OE75:June 75:89
Design Forces for Offshore Nuclear Power Plant Construction, Joseph A. Fischer, Ian Watson, Harcharan Singh, T. D. Lu, Surendra K. Saxena, Demetrious Koutsoftas and Lloyd E. Stahl, OE75: June 75:1
Determination of the Missile Load for Steel Columns of a Nuclear Power Plant Structure, Zin-Tsai Shi, STN75:Dec 75:II-29
Development of United States Atomic Energy Commission Regulatory Standards, Robert Minogue, SDNPF:Dec 73:III-110
Diffusion and Mixing Processes of an Ocean (Abstract), Abhimanyu Swain, Harold D. Palmer and Kent T.S. Tzou, OE75:June 75:1436
Drag Forces on Tornado Borne Missiles, James F. Costello and Willy Z. Sadeh, STN75:Dec 75:II-21
Fish Impingement at Monticello Nuclear Plant, Laurence M. Grotbeck and James L. Bechthold, PO1:July 75:69:11409
Floating Nuclear Plants and Offshore Energy Centers, Thomas J. DiClemente, OE75:June 75:29
Flood Control for an Island Sited Nuclear Plant, Joel L. Caves, WW76:Aug 76:872

Foundation Considerations for a Nuclear Power Plant, George A. Faillace, CO1:Mar 75:165:11181
General Panel — Summary of Presentations, John D. Stevenson, E. J. Keith, Nathan M. Newmark, R. E. Keever, Jack E. Cermak, H. Bolton Seed and M. J. Holley, SDNPF:Dec 73:III-81
Interaction of Soil and Power Plants in Earthquakes, Jeremy Isenberg and Samy A. Adham, PO2:Oct 72:273:9242
Keowee-Toxaway Power Project — OUTSTANDING, Roney A. Heinz, CE:June 75:46
Law of Catastrophic Events on Offshore Nuclear Facilities, John D. Wik and Joseph T. Bockrath, OE75:June 75:1455
Liquefaction Considerations in Nuclear Plant Design, Joseph L. Ehasz, Jr. and William F. Mercurio, STN75:Dec 75:II-142
Local and Regional Economic Impacts of Energy Complexes, Courtney Riordan, EFEEC:Aug 75:312
New Licensing Philosophy Concerning Soil Structure Interaction, Kanwar K. Kapur, STN75:Dec 75:II-238
Nuclear Power Plant Cooling System Selection, Stephen C. Ko, PO1:July 75:55:11405
Nuclear Turbine-Generator Foundation Model Tests, Ish K. Aneja and Brian W. Dimmick, Preprint No.2704, Apr 76, 30pp.
Oceanographic Survey in Support of FNPP-AGS Site, Lloyd F. Lewis, OE75:June 75:9
Offshore Nuclear Power Plants Workshop Results, Harry Rood and William S. Gaither, OE75:June 75:58
Poll Shows Nuclear Plant Construction Favored by Most: Scientists Don't Agree, CE:Sept 75:20
Progress Report of ASCE Ad Hoc Committee on Soil Structure Interaction, Izzat M. Idriss, STN75:Dec 75:II-236
Role of Offshore Nuclear Power Plants, Joseph A. Fischer and Harcharan Singh, PO1:July 75:1:11407
Seismic Design Spectra for Nuclear Power Plants, Nathan M. Newmark, John A. Blume and Kanwar K. Kapur, PO2:Nov 73:287:10142
Seismic Supports for Electrical Cable Systems, Anil K. Kar and Sitansu S. Sinha, PO1:July 75:95:11464
A Structural Design Decision Methodology for Nuclear Power Plants, Samad Zendehrouh and Masanobu Shinozuka, ST76:Aug 76:517
Structural Design of Nuclear Plant Facilities, John D. Stevenson, Chmn., SDNPF:Dec 73
Three Dimensional Seismic Analysis for a Floating Nuclear Plant Using Finite Element Procedures, Harry W. Johnson, Ashok K. Vaish and Frank L. Porter, Preprint No.2700, Apr 76, 23pp.
Tornado-Borne Missile Speeds, James F. Costello, Emil Simiu and Martin R. Cordes, Preprint No.2739, Sept 76, 29pp.
Uncertainties in Soil Structure Interaction, John T. Christian, STN75:Dec 75:II-105
Vertical Seismic Response Spectra, Paul C. Rizzo, Donald E. Shaw and Matthew D. Snyder, PO1:Jan 76:121:11858
Waste Heat Discharges from Offshore Power Plants, E. Eric Adams, Charles W. Almquist, Diane V. Ingraham and Keith D. Stolzenbach, OE75:June 75:41

Nuclear Radiation

Air Pollution Factors in the Planning of Energy Complexes, Maynard E. Smith, EFEEC:Aug 75:211
Civil and Environmental Engineering Aspects of Energy Complexes, Alvin S. Goodman, Editor, EFEEC:Aug 75
A Structural Design Decision Methodology for Nuclear Power Plants, Samad Zendehrouh and Masanobu Shinozuka, ST76:Aug 76:517

Nuclear Reactor Containment

Applications of Photoelasticity to Structural Analysis, J. F. Jullien, R. Duhau and J. C. Cubaud, EM5:Oct 76:867:12486
Creep and Shrinkage in Reactor Containment Shells, Zdenek P. Bazant, Domingo J. Carreira and Adolf Walser, ST10:Oct 75:2117:11632
Liner Anchorage Analysis for Nuclear Containments, Ted L. Winstead, Edwin G. Burdette and Daryl R. Armentrout, ST10:Oct 75:2103:11635

Nuclear Reactors

Analysis of Moderately Thick Shells of Revolution, John E. Goldberg, Yu-Kuang Tang and Divaker V. Pathak, ST4:Apr 75:821:11235
Flood Protection of Crystal River Unit 3 Nuclear Plant, Ronald M. Noble and Bert Simpson, PO1:July 75:85:11458
Fort St. Vrain PCRV Bottom Head Construction, Hughes M.G. Nerses and Clyde B. Tatum, CO2:June 75:391:11394
Fracture and Stress-Strain Relationship of Concrete Under Triaxial Compression, Ranga Palaniswamy and Surendra P. Shah, ST5:May 74:901:10547
Interaction of Soil and Power Plants in Earthquakes, Jeremy Isenberg and Samy A. Adham, PO2:Oct 72:273:9242

Nuclear Safety

ASCE and Nuclear Power Plants, Arthur J. Fox, Jr., EI3:July 76:279:12259
Drag Forces on Tornado Borne Missiles, James F. Costello and Willy Z. Sadeh, STN75:Dec 75:II-21
The Impact of Nuclear Fuel Cycle Centers on Shipping Special Nuclear Materials and Wastes, J. O. Blomeke, EFEEC:Aug 75:181
Tornado-Borne Missile Speeds, James F. Costello, Emil Simiu and Martin R. Cordes, Preprint No.2739, Sept 76, 29pp.
Unreliability of Qualifying Active Mechanical Equipment by Testing Only, Ahmed E. Meligi, STN75:Dec 75:II-11

Numerical Analysis

Accuracy of Numerical Solutions for Laterally Loaded Piles in Elastic Half-Space, Aldo Evangelista and Carlo Viggiani, NMG:June 76:III-1367
Accuracy of Some Numerical Methods for Column Buckling, Paul Seide, EM5:Oct 75:549:11607
Beam Deflections by Numerical Integration, Stephen J. Speicher, CE:Dec 75:67
Circulation and Surge Modeling in Pamlico Sound, N.C., Michael Amein and Damodar S. Airan, Preprint No.2665, Apr 76, 29pp.
Comparison of Four Numerical Methods for Flood Routing, Roland K. Price, HY7:July 74:879:10659
Computation of Flow through Masonboro Inlet, N.C., Michael Amein, WW1:Feb 75:93:11124
Computation of Tidal Flow in Well-Mixed Estuaries, Carl E. Pearson and Donald F. Winter, HY3:Mar 76:367:11990
Design Criteria for Anchor Cables and Bolting in Underground Openings, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:II-859
Development of Analysis Techniques for Deployment, Robert W. Thresher, OE75:June 75:593
Displacements and Losses in Multistage Prestressed Members, Amin Ghali, Romy G. Sisodiya and Gamil S. Tadros, ST11:Nov 74:2307:10968
Dynamic Relaxation Solution of Seepage Problems, Chandrakant J. Parekh, NMG:June 76:II-1133
Effective Modulus of Twisted Wire Cables, George A. Costello and James W. Phillips, EM1:Feb 76:171:11944
Exact Solution of Gradually Varied Flow, Mohammad Akram Gill, HY9:Sept 76:1353:12406
Explicit Finite-Difference Methods in Geomechanics, Peter Cundall, NMG:June 76:I-132
Finite Element Study of a Shallow Tunnel in Rock Exhibiting Clay-Induced Anisotropy, C. F. Lee and Kwan Y. Lo, NMG:June 76:II-834
Instability in Tidal Flow Computational Schemes, T. John Weare, HY5:May 76:569:12100
Integration of Linear Equations of Motion, Robert J. Melosh, ST7:July 75:1551:11444
Iterative Improvement of Finite Element Approximations, Ranbir S. Sandhu, U. Salaam and K. J. Singh, NMG:June 76:I-104

New Procedure for Numerical Relative Orientation, Santosh K. Mahajan, SU2:Nov 74:155:10962
Non-Linear Elastic Approximations of the Behaviour of Soils, Arnold Verruijt, NMG:June 76:III-1321
Numerical Analysis of Embankments over Soft Soils, Robert L. Thoms, Richard A. Pecquet and Ara Arman, NMG:June 76:II-623
A Numerical Method of Analysis of Foundation Plates, Alexander M. Gorlov, NMG:June 76:III-1371
A Numerical Model for Liquefaction, Chyr Pyng Liou, Victor L. Streeter and Frank E. Richart, Jr., Preprint No.2752, Sept 76, 30pp.
Numerical Model of St. Lawrence River Estuary, David Prandle and Norman L. Crookshank, HY4: Apr 74:517:10472
A Numerical Model of the Time-Dependent, Three-Dimensional Structure of Circulation in Large Lakes, Ralph Ta-shun Cheng, Preprint No.2692, Apr 76, 27pp.
Numerical-Perturbation Methods in Numerical Mechanics, Ali Hasan Nayfeh, NMG:June 76:I-168
Numerical Solution of Boussinesq Equation, Sita Ram Singh and C. M. Jacob, EM5:Oct 76:807: 12463
Numerical Solution of Unconfined Seepage Problems, W. D. Liam Finn and Erol Varoglu, NMG:June 76: III-1465
Numerical Treatment of Some Geomechanical Problem Areas in Oil and Natural Gas Production, Jan Geertsma, NMG:June 76:II-759
On Green's Function Techniques for Solutions of Floating Body Problems, Rong-Tai Ho and Ami Harten, OE75:June 75:939
Post-Local-Buckling Behavior of Continuous Beams, Shien T. Wang and Sheng S. Yeh, ST6:June 74: 1169:10595
Review of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY11:Nov 75:1405:11693
Seismic Evaluation of Embankments, Richard W. Kramer, NMG:June 76:III-1445
Seismic Response of Reservoir-Dam Systems, E. Benjamin Wylie, HY3:Mar 75:403:11184
Sensitivity of Estuarine Circulation Model, John D. Wang, OE75:June 75:1035
Simulation Accuracies of Gradually Varied Flow, J. Peter Jolly and Vujica Yevjevich, HY7:July 74: 1011:10677
Some Aspects of Theory and Applications of Numerical Methods, Chandrakant S. Desai, NMG: June 76:I-58
Special Problems Related to Linear Equation Solvers, Christian Meyer, ST4:Apr 75:867:11223
Stresses in Soils due to Vertical Load on Piles, Verendra Singh, NMG:June 76:I-451
Wave Forces on Large Bodies—A Survey of Numerical Methods, Jared L. Black, OE75:June 75: 924

Numerical Precision

Special Problems Related to Linear Equation Solvers, Christian Meyer, ST4:Apr 75:867:11223

Nutrients

Challenge of Michaelis-Menton Constants, Brian W. Mar, TN: EE5:Oct 76:1114:12442
Concepts in the Control of Nonpoint Water Pollution, M. H. Frere, David A. Woolhiser, J. H. Caro, B. A. Stewart and W. H. Wischmeier, Preprint No.2667, Apr 76, 24pp.
Design of Integrated Approach to Nutrient Removal, David L. Eisenhauer, Ronald B. Sieger and Denny S. Parker, EE1:Feb 76:37:11906
Nutrient Transformations in Mass Cultures of Marine Algae , Joel C. Goldman and John H. Ryther, EE3: June 75:351:11358
Real Time Model of the Nitrogen Cycle in an Estuary, Tavit O. Najarian and Donald R.F. Harleman, Preprint No.2676, Apr 76, 30pp.
Simulation of Agricultural Runoff, Anthony S. Donigian, Jr. and Norman H. Crawford, Preprint No.2670, Apr 76, 27pp.
Soil-Plant Relationships in Dredged Material Marshes with Particular Reference to Heavy Metal and Nutrient Availability, J. S. Boyce, DIEE:Jan 76:496
Subsurface Drainage Related to Agronomic Factors on Brookston Clay Soil, E. F. Bolton and Frank R. Hore, IR76:July 76:221

Obituaries of Members

See Name of Deceased Member in Name Index

Objectives

The Goals of Water Resources Planning and Management, Carl H. Gaum, Preprint No.2719, Apr 76, 17pp.
Objectives of Conference on Energy Complexes, Alvin S. Goodman, EFEEC:Aug 75:1
Objectives of Water Quality Planning, Keith S. Krause, HY3:Mar 75:471:11200
Session I — Objectives (Introduction), Jan C. Philips, EFEEC:Aug 75:404

Obstruction to Flow

Observations of Natural and Man-Made River Spurs, Thomas Blench, Victor J. Galay and E. K. Yaremko, WW76:Aug 76:1363

Occupations

Can We Engineer Vocational Assessment and Counseling for Everyone?, John L. Holland, CE: May 76:92

Ocean Bottom

Coring the Deep Oceans for Science, Robert R. Knapp and Valdemar F. Larson, OE75:June 75:784
Engineering Behavior of Calcareous Clays, Vito A. Nacci, Mian-Chang Wang and Kenneth R. Demars, OE75:June 75:380
Liquefaction Potential at Ekotisk Tank in North Sea, Kenneth L. Lee and John A Focht, Jr., GT1:Jan 75:1:11054
Ocean-Bottom Control Net-Unit Configuration, Narendra K. Saxena and Dimitrios P. Xirodimas, SU1:Dec 76:53:12642
Remote Classification of Marine Sediments, Arthur S. Westneat, DIEE:Jan 76:289
Undersea Exploration and Drilling, Frank C. Hess, Jr., Preprint No.2743, Sept 76, 9pp.
Wave Induced Pressures in Permeable Seabeds, Hermann Moshagen and Alf Torum, WW1:Feb 75: 49:11099

Ocean Currents

Waves of Maximum Height on Uniform Currents, Robert A. Dalrymple and Robert G. Dean, WW3: Aug 75:259:11509

Ocean Engineering

Address at Ocean Engineering III, Paul Atkinson, OE75:June 75:1476
Analysis of Cable Dynamics—State-of-the-Art Summary, John H. Nath, OE75:June 75:623
Artificial Island Engineering, Jan Malan Jordaan, Jr., OE75:June 75:777
Automated Hydrographic Survey Systems, Pressley L. Campbell, OE75:June 75:1181
Civil Engineering and Offshore Construction, Ben C. Gerwick, Jr., Preprint No.2753, Sept 76, 6pp.
Coastal Management: Impact on the Ocean Engineer, Francis X. Cameron, OE75:June 75:1451
Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, Preprint No.2702, Apr 76, 30pp.
Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, WW4:Nov 76:455: 12561
Concrete Structures for Subsea Oil Recovery — Design Considerations, Everald V. Wright and Marcel Gerbault, Preprint No.2675, Apr 76, 21pp.
Coring the Deep Oceans for Science, Robert R. Knapp and Valdemar F. Larson, OE75:June 75:784
The Corrosion of Coated Steel Piles in the Ocean, E. Escalante, W. P. Iverson and W. F. Gerhold, Preprint No.2733, Apr 76, 22pp.

Deepsea Drilling Workshop, Jared L. Black and Joel M. Goodman, OE75:June 75:846
Development of Analysis Techniques for Deployment, Robert W. Thresher, OE75:June 75: 593
Development of the Continental Shelf, William S. Gaither, Preprint No.2813, Sept 76, 9pp.
Diffusion and Mixing Processes of an Ocean (Abstract), Abhimanyu Swain, Harold D. Palmer and Kent T.S. Tzou, OE75:June 75:1436
Dynamics of Marine Structures, Joseph P. Murtha, OE75:June 75:914
Extremal Statistics in Ocean Engineering, Leon E. Borgman, OE75:June 75:117
Hawaii's Offshore Runway, Wayne L. Rickerd, Preprint No.2696, Apr 76, 19pp.
Legal-Institutional Framework for the Continental Shelf, Paul O. Bleecker, OE75:June 75:1437
Materials and Specification for Marine Structures, D. L. Frisby, OE75:June 75:818
New Instruments for Studying Ocean Pollution, Willard Bascom, Preprint No.2721, Apr 76, 13pp.
North Sea Oil-Water Mix, Roney A. Heinz, CE:Apr 75:70
Ocean Engineering in the Design of Sea Islands, Michael J. McCarthy, Edward J. Schmeltz and Joseph Bonasia, OE75:June 75:762
Oceanographic Survey in Support of FNPP-AGS Site, Lloyd F. Lewis, OE75:June 75:9
The Oceans and American Policy, Thomas A. Clingan, Jr., OE75:June 75:1490
Paul Bunyan Among Offshore Steel Structures, CE: Apr 76:51
Pressure Field at Deep Depth due to Surface Motion, J. D. Lin and Edward Y.T. Kuo, OE75:June 75: 1276
Problems in Long-Life Fatigue Assessment for Fixed Offshore Structures, Peter W. Marshall, Preprint No.2638, Apr 76, 24pp.
Radar in Oceanography (Abstract), Duncan Ross, Paul G. Teleki and James Wiley, OE75:June 75: 1169
Recent Developments in Underwater Construction, Philip K. Rockwell, Preprint No.2669, Apr 76, 28pp.
Research on Titanium Wire Rope for Marine Use, Darrell A. Milburn and Michael Chi, Preprint No.2713, Apr 76, 21pp.
Research on Titanium Wire Rope for Marine Use, Darrell A. Milburn and Michael Chi, ST11:Nov 76: 2137:12535
The Semi-Submersible Storage and Production Unit, Frank N. Biewer, Preprint No.2639, Apr 76, 25pp.
Status of NOAA's Ocean Dumping Research in the New York Bight, R. Lawrence Swanson, Preprint No.2690, Apr 76, 30pp.
Steels for the Sea, J. H. Gross, Preprint No.2732, Apr 76, 26pp.
Supertanker Fixed Berth in Open Ocean, Atsushi Seiki and Yasumasha Shimada, CE:Apr 76:56
Technique to Develop Atlantic OCS Oil and Gas, W. B. Bleakley, OE75:June 75:830
Wave Climate at Plymouth, Massachusetts, Albert L. Robitaille, OE75:June 75:1152
Wave-Induced Mass Transport in Water Waves, Robert A. Dalrymple, WW2:May 76:255:12158
Waves of Maximum Height on Uniform Currents, Robert A. Dalrymple and Robert G. Dean, WW3: Aug 75:259:11509

Oceanic Crust

Coring the Deep Oceans for Science, Robert R. Knapp and Valdemar F. Larson, OE75:June 75:784

Oceanographic Surveys

Critical Areas for Research in Oceanographic and Hydrographic Surveying and Charting, Harold D. Palmer, SU1:Oct 75:43:11627
Marine Geodesy — Precise Ocean Surveys, Narendra K. Saxena, SU1:Oct 75:73:11631
Oceanographic Survey in Support of FNPP-AGS Site, Lloyd F. Lewis, OE75:June 75:9

Oceanography

Extremal Statistics in Ocean Engineering, Leon E. Borgman, OE75:June 75:117
Radar in Oceanography (Abstract), Duncan Ross, Paul G. Teleki and James Wiley, OE75:June 75: 1169
Status of NOAA's Ocean Dumping Research in the New York Bight, R. Lawrence Swanson, Preprint No.2690, Apr 76, 30pp.
Use of Remote Sensing for Mapping Wetlands, Robert J. Reimold and Rick A. Linthurst, TE2:May 75:189:11293
Wave-Induced Mass Transport in Water Waves, Robert A. Dalrymple, WW2:May 76:255:12158

Oceans

Computer Modeling of Erodible Flood Channels and Deltas, Howard H. Chang and Joseph C. Hill, HY10:Oct 76:1461:12485
Distribution of Toxic Heavy Metals in Marine and Freshwater Sediments, J. M. Brannon, R. M. Engler, J. R. Rose, P. G. Hunt and I. Smith, DIEE: Jan 76:455
Remote Classification of Marine Sediments, Arthur S. Westneat, DIEE:Jan 76:289
Statistical Design Basis for Submerged Diffuser, Thomas E. Pease and Michael J. Skelly, PO1:July 75:11:11408
Use of Jet Pumps in Marine Waste Disposal, Yerachmiel Argaman, Michael Vajda and Noah Galil, EE5:Oct 75:703:11639

Ocean Waves

Computation of Wave Heights Due to Refraction and Friction, Ove Skovgaard, Ivar G. Jonsson and Jens Aa. Bertelsen, WW1:Feb 75:15:11100
Cross-Flow Response of Piles Due to Ocean Waves, Rimas Vaicaitis, EM1:Feb 76:121:11897
Energy Dissipation on a Rough Slope, Ole Secher Madsen and Stanley M. White, WW1:Feb 76:31: 11904
Extreme Wave Height Distributions Over Oceans, Herbert C.S. Thom, WW3:Aug 73:355:9939
Extreme Wave Heights for Cleveland Harbor, D. T. Resio, OE75:June 75:62
Ocean Wave Refraction Near Reykjavik, Iceland, Thorbjorn Karlsson and J. Eliasson, OE75:June 75: 1232
Offshore Nuclear Power Plants Workshop Results, Harry Rood and William S. Gaither, OE75:June 75: 58
Pressure Field at Deep Depth due to Surface Motion, J. D. Lin and Edward Y.T. Kuo, OE75:June 75: 1276
Wave Climate at Plymouth, Massachusetts, Albert L. Robitaille, OE75:June 75:1152
Wave Forces on Cylinders Near Plane Boundary, Tokuo Yamamoto, John H. Nath and Larry S. Slotta, WW4:Nov 74:345:10944
Waves of Maximum Height on Uniform Currents, Robert A. Dalrymple and Robert G. Dean, WW3: Aug 75:259:11509

Odometers

Recording Rapid Settlement by the Oedometer, David M. McCann, Jon Darwell and Bruce Denness, OE75:June 75:401

Offshore Drilling

The Accelerated Deep Water Development System, R. D. Walker and J. J. Zdeb, Preprint No.2677, Apr 76, 30pp.
Artificial Island Engineering, Jan Malan Jordaan, Jr., OE75:June 75:777
California Soon to Have Platform in 850 Ft of Water, CE:Apr 76:49
Condeep—In 400 Ft of Water, Concrete Caisson Requires No Piles, Ben C. Gerwick, Jr., CE:Apr 76: 54
Coring the Deep Oceans for Science, Robert R. Knapp and Valdemar F. Larson, OE75:June 75:784
Deepsea Drilling Workshop, Jared L. Black and Joel M. Goodman, OE75:June 75:846

Design of Piles for Deep Water Offshore Structures, P. George and Ian M. Smith, NMG:June 76:I-419
Exxon's 850-ft Platform for Santa Barbara Channel, William J. Ruez, OE75:June 75:801
German Design of Floating Concrete Structures, Richard Heinen, Preprint No.2735, Apr 76, 22pp.
Impact of the Public on Proposed Offshore Oil Terminal and Refinery, John P. King, EFEEC:Aug 75:276
Legal-Institutional Framework for the Continental Shelf, Paul O. Bleecker, OE75:June 75:1437
New Jack-Up Drill Rig Extends Their Range Into 375-Ft Water Depth, CE:Apr 76:53
Paul Bunyan Among Offshore Steel Structures, CE: Apr 76:51
Preview—1976 Offshore Technology Conference, CE: Apr 76:67
Problems in Long-Life Fatigue Assessment for Fixed Offshore Structures, Peter W. Marshall, Preprint No.2638, Apr 76, 24pp.
Seismic Analysis of Offshore Structures in the Inelastic Range, Joseph Kallaby, Preprint No.2722, Apr 76, 30pp.
Technique to Develop Atlantic OCS Oil and Gas, W. B. Bleakley, OE75:June 75:830
Tension Leg Platforms: Design and Performance, Dean A. Kypke and Leonardo Perez y Perez, Preprint No.2698, Apr 76, 30pp.
Thermal Analysis of Frozen Embankment Islands, Guy R. Bafus and Gary L. Guymon, WW2:May 76:123:12139
Undersea Exploration and Drilling, Frank C. Hess, Jr., Preprint No.2743, Sept 76, 9pp.
Wave Forces on Large Bodies—A Survey of Numerical Methods, Jared L. Black, OE75:June 75: 924

Offshore Platforms

The Accelerated Deep Water Development System, R. D. Walker and J. J. Zdeb, Preprint No.2677, Apr 76, 30pp.
California Soon to Have Platform in 850 Ft of Water, CE:Apr 76:49
Concrete Structures for Subsea Oil Recovery — Design Considerations, Everald V. Wright and Marcel Gerbault, Preprint No.2675, Apr 76, 21pp.
Deep Sea Construction, S. Samuel Doughty, CO3: Sept 75:607:11575
Deepsea Drilling Workshop, Jared L. Black and Joel M. Goodman, OE75:June 75:846
Design Basis Flooding at Offshore Reactor Sites, Ronald M. Noble, OE75:June 75:89
Design Forces for Offshore Nuclear Power Plant Construction, Joseph A. Fischer, Ian Watson, Harcharan Singh, T. D. Lu, Surendra K. Saxena, Demetrious Koultsoftas and Lloyd E. Stahl, OE75: June 75:1
Dynamics of Marine Structures, Joseph P. Murtha, OE75:June 75:914
Exxon's 850-ft Platform for Santa Barbara Channel, William J. Ruez, OE75:June 75:801
Failure Modes for Offshore Platforms: Part II — Fatigue, Peter W. Marshall, ST76:Aug 76:309
Floating Nuclear Plants and Offshore Energy Centers, Thomas J. DiClemente, OE75:June 75:29
Impact of the Public on Proposed Offshore Oil Terminal and Refinery, John P. King, EFEEC:Aug 75:276
Ju'aymah Crude Oil Loading Terminal, R. D. Lee, Preprint No.2642, Apr 76, 22pp.
Law of Catastrophic Events on Offshore Nuclear Facilities, John D. Wik and Joseph T. Bockrath, OE75:June 75:1455
Materials and Specification for Marine Structures, D. L. Frisby, OE75:June 75:818
Oceanographic Survey in Support of FNPP-AGS Site, Lloyd F. Lewis, OE75:June 75:9
OCIMF Marine Terminal Activities, Thomas F. Bell, Preprint No.2654, Apr 76, 25pp.
Offshore Nuclear Power Plants Workshop Results, Harry Rood and William S. Gaither, OE75:June 75: 58
Offshore Platform Reliability — A Parameter Study, Bernhard Stahl and K. A. Blenkarn, ST76:Aug 76: 419
Paul Bunyan Among Offshore Steel Structures, CE: Apr 76:51
Preliminary Dynamic Assessment of Deepwater Platforms, Paul H. Wirsching and Peter H. Prasthofer, ST7:July 76:1447:12264
Preview—1976 Offshore Technology Conference, CE: Apr 76:67
Seismic Analysis of Offshore Structures in the Inelastic Range, Joseph Kallaby, Preprint No.2722, Apr 76, 30pp.
SPM Model Testing for Proposed U.S. Superports, J. Phil Wilbourn, Preprint No.2685, Apr 76, 20pp.
Supertanker Fixed Berth in Open Ocean, Atsushi Seiki and Yasumasha Shimada, CE:Apr 76:56
Waste Heat Discharges from Offshore Power Plants, E. Eric Adams, Charles W. Almquist, Diane V. Ingraham and Keith D. Stolzenbach, OE75:June 75: 41
Wave Forces on Large Bodies—A Survey of Numerical Methods, Jared L. Black, OE75:June 75: 924

Offshore Structures

Address at Ocean Engineering III, Paul Atkinson, OE75:June 75:1476
Analysis of Offshore Concrete Caisson Dikes under Cyclic Loading, John T. Christian and Jean M.E. Audibert, NMG:June 76:II-979
Artificial Island Engineering, Jan Malan Jordaan, Jr., OE75:June 75:777
Aspects of the Analysis of Gravity Offshore Structures, Ian M. Smith, NMG:June 76:II-957
Bearing Capacity of Offshore Gravity Structures, Surendra K. Saxena, W. M. Kilkenny and Joseph A. Fischer, OE75:June 75:450
California Soon to Have Platform in 850 Ft of Water, CE:Apr 76:49
Candidate Industries and General Island Locations, Daniel M. Bragg, OE75:June 75:751
Civil Engineering and Offshore Construction, Ben C. Gerwick, Jr., Preprint No.2753, Sept 76, 6pp.
Concrete Barge of First Totally Offshore LPG Facility, Arthur R. Anderson, CE:Apr 76:58
Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, WW4:Nov 76:455: 12561
Concrete Replaces Steel in Offshore Coal-Loading Terminal, A. G.F. Eddie, CE:Apr 76:60
Concrete Structures for Subsea Oil Recovery — Design Considerations, Everald V. Wright and Marcel Gerbault, Preprint No.2675, Apr 76, 21pp.
Condeep—In 400 Ft of Water, Concrete Caisson Requires No Piles, Ben C. Gerwick, Jr., CE:Apr 76: 54
The Corrosion of Coated Steel Piles in the Ocean, E. Escalante, W. P. Iverson and W. F. Gerhold, Preprint No.2733, Apr 76, 22pp.
Deep Sea Construction, S. Samuel Doughty, CO3: Sept 75:607:11575
Design Basis Flooding at Offshore Reactor Sites, Ronald M. Noble, OE75:June 75:89
Design Forces for Offshore Nuclear Power Plant Construction, Joseph A. Fischer, Ian Watson, Harcharan Singh, T. D. Lu, Surendra K. Saxena, Demetrious Koutsoftas and Lloyd E. Stahl, OE75: June 75:1
Design of Piles for Deep Water Offshore Structures, P. George and Ian M. Smith, NMG:June 76:I-419
Development of the Continental Shelf, William S. Gaither, Preprint No.2813, Sept 76, 9pp.
Drag and Inertia Coefficients in Oscillatory Flow About Cylinders, C. J. Garrison, Preprint No.2693, Apr 76, 24pp.
Dynamics of Marine Structures, Joseph P. Murtha, OE75:June 75:914
Earthquake Response of Offshore Structures, Owen M. Kirkley and Joseph P. Murtha, OE75:June 75: 865
Extreme Wind, Wave and Tide, Cheng Y. Yang, Mehmet Aziz Tayfun and M. H. Fallah, OE75:June 75:134

Exxon's 850-ft Platform for Santa Barbara Channel, William J. Ruez, OE75:June 75:801
Failure Modes for Offshore Platforms: Part II — Fatigue, Peter W. Marshall, ST76:Aug 76:309
Floating Nuclear Plants and Offshore Energy Centers, Thomas J. DiClemente, OE75:June 75:29
Floating Plate under Wind Waves and Human Response, Masanobu Shinozuka, H. M. Hwang and E. Makitani, Preprint No.2650, Apr 76, 30pp.
Forces on Many Cylinders Near a Plane Boundary, Tokuo Yamamoto and John H. Nath, Preprint No.2633, Apr 76, 19pp.
German Design of Floating Concrete Structures, Richard Heinen, Preprint No.2735, Apr 76, 22pp.
Hawaii's Offshore Runway, Wayne L. Rickerd, Preprint No.2696, Apr 76, 19pp.
Highlights of San Diego Convention, CE:June 76:67
Hydrodynamic Forces on Multiple Circular Cylinders, Tokuo Yamamoto, HY9:Sept 76:1193: 12395
Impact of the Public on Proposed Offshore Oil Terminal and Refinery, John P. King, EFEEC:Aug 75:276
Improved Fish Protection at Intake Systems, Victor J. Schuler and Lory E. Larson, EE6:Dec 75:897: 11756
Ju'aymah Crude Oil Loading Terminal, R. D. Lee, Preprint No.2642, Apr 76, 22pp.
Lake Erie Airport Study — A Status Report, Herbert R. Crawford, Preprint No.2635, Apr 76, 27pp.
Law of Catastrophic Events on Offshore Nuclear Facilities, John D. Wik and Joseph T. Bockrath, OE75:June 75:1455
Legal-Institutional Framework for the Continental Shelf, Paul O. Bleecker, OE75:June 75:1437
New Jack-Up Drill Rig Extends Their Range Into 375-Ft Water Depth, CE:Apr 76:53
New York Offshore Airport Feasibility Study, Lawrence Lerner, Preprint No.2634, Apr 76, 25pp.
North Sea Oil-Water Mix, Roney A. Heinz, CE:Apr 75:70
Oceanographic Survey in Support of FNPP-AGS Site, Lloyd F. Lewis, OE75:June 75:9
OCIMF Marine Terminal Activities, Thomas F. Bell, Preprint No.2654, Apr 76, 25pp.
Offshore Nuclear Power Plants Workshop Results, Harry Rood and William S. Gaither, OE75:June 75: 58
Offshore Platform Reliability — A Parameter Study, Bernhard Stahl and K. A. Bienkarn, ST76:Aug 76: 419
Paul Bunyan Among Offshore Steel Structures, CE: Apr 76:51
Pioneer Offshore LNG Terminal, Joseph Peraino and William R. Rogers, CE:Apr 76:82
Polyethylene Pipe Solutions to Sewer Outfalls, Donald R. Wells, CE:Sept 76:62
Preliminary Dynamic Assessment of Deepwater Platforms, Paul H. Wirsching and Peter H. Prasthofer, ST7:July 76:1447:12264
Probability Analysis of Deep Water Breaking Waves, John H. Nath and Fred L. Ramsey, Preprint No.2691, Apr 76, 10pp.
Pullout Resistance of Horizontal Anchors, Braja M. Das and Gerald R. Seeley, OE75:June 75:434
Role of Offshore Nuclear Power Plants, Joseph A. Fischer and Harcharan Singh, PO1:July 75:1:11407
Seismic Analysis of Offshore Structures in the Inelastic Range, Joseph Kallaby, Preprint No.2722, Apr 76, 30pp.
Seismic Design of Offshore Concrete Structures, Ben C. Gerwick, Jr. and Shighero Watanabe, Preprint No.2729, Apr 76, 8pp.
The Semi-Submersible Storage and Production Unit, Frank N. Biewer, Preprint No.2639, Apr 76, 25pp.
SPM Model Testing for Proposed U.S. Superports, J. Phil Wilbourn, Preprint No.2685, Apr 76, 20pp.
Stability of Offshore Pipe in Cohesive Sediment, Osman I. Ghazzaly, Leland M. Kraft, Jr. and S. J. Lim, OE75:June 75:490
Structural Response to Wave and Current Forces, Song S. Wu and Chi C. Tung, OE75:June 75:849
Tension Leg Platforms: Design and Performance, Dean A. Kypke and Leonardo Perez y Perez, Preprint No.2698, Apr 76, 30pp.
Thermal Analysis of Frozen Embankment Islands, Guy R. Bafus and Gary L. Guymon, WW2:May 76:123:12139
Three-Dimensional Analysis of Vertical Pile Groups, Prasanta K. Banerjee and Richard M. Driscoll, NMG:June 76:I-438
Three Dimensional Seismic Analysis for a Floating Nuclear Plant Using Finite Element Procedures, Harry W. Johnson, Ashok K. Vaish and Frank L. Porter, Preprint No.2700, Apr 76, 23pp.
Waste Heat Discharges from Offshore Power Plants, E. Eric Adams, Charles W. Almquist, Diane V. Ingraham and Keith D. Stolzenbach, OE75:June 75: 41
Wave Climate at Plymouth, Massachusetts, Albert L. Robitaille, OE75:June 75:1152

Offstreet Parking

Parking and Zoning, David K. Witheford, UP1:May 75:1:11294

Off the Road Vehicles

Northern Off-Road Transportation in the 70's, I. A. Thomas, CO3:Sept 75:635:11573
Off-Highway Transportation in the Arctic, Arthur D. Anderson, CE:Mar 76:72

Ohio

Extreme Wave Heights for Cleveland Harbor, D. T. Resio, OE75:June 75:62
Landmarks in Reinforced Concrete, John A. Diehl, CE:Nov 75:87
Liability Considerations in State Dam Permit and Inspection Programs (A Look at Ohio's Program), Roy Winkle, EFRLD:Sept 75:113
The Miami Conservancy District — A Study in Self Help, L. Bennett Coy, Preprint No.2747, Sept 76, 11pp.
Prediction of Flood Volume from Small Humid Region Watersheds, Sie Ling Chiang, HY7:July 75: 817:11466

Ohio River

Return of Fines from Commercial Dredging to the Ohio River, James C. North and John Clark, DIEE:Jan 76:593

Oil Industry

California Soon to Have Platform in 850 Ft of Water, CE:Apr 76:49
New Jack-Up Drill Rig Extends Their Range Into 375-Ft Water Depth, CE:Apr 76:53

Oil Lines

Liquefaction Criteria for the Trans-Alaska Pipeline, Neville C. Donovan and Sukhmander Singh, Preprint No.2752, Sept 76, 30pp.
Technique to Develop Atlantic OCS Oil and Gas, W. B. Bleakley, OE75:June 75:830

Oil Recovery

North Sea Oil-Water Mix, Roney A. Heinz, CE:Apr 75:70

Oil Spills

Preview—1976 Offshore Technology Conference, CE: Apr 76:67
U.S. Coast Guard's Role in Environmental Protection, William M. Devlin, Preprint No.2725, Apr 76, 10pp.

Oil Storage

The Accelerated Deep Water Development System, R. D. Walker and J. J. Zdeb, Preprint No.2677, Apr 76, 30pp.
Condeep—In 400 Ft of Water, Concrete Caisson Requires No Piles, Ben C. Gerwick, Jr., CE:Apr 76: 54
German Design of Floating Concrete Structures, Richard Heinen, Preprint No.2735, Apr 76, 22pp.

Impact of the Public on Proposed Offshore Oil Terminal and Refinery, John P. King, EFEEC:Aug 75:276
Ju'aymah Crude Oil Loading Terminal, R. D. Lee, Preprint No.2642, Apr 76, 22pp.
OCIMF Marine Terminal Activities, Thomas F. Bell, Preprint No.2654, Apr 76, 25pp.
Seismic Design of Liquid-Storage Tanks, Howard I. Epstein, ST9:Sept 76:1659:12380
The Semi-Submersible Storage and Production Unit, Frank N. Biewer, Preprint No.2639, Apr 76, 25pp.
SPM Model Testing for Proposed U.S. Superports, J. Phil Wilbourn, Preprint No.2685, Apr 76, 20pp.
Tension Leg Platforms: Design and Performance, Dean A. Kypke and Leonardo Perez y Perez, Preprint No.2698, Apr 76, 30pp.
U.S. Coast Guard's Role in Environmental Protection, William M. Devlin, Preprint No.2725, Apr 76, 10pp.

Oil Wells
Exxon's 850-ft Platform for Santa Barbara Channel, William J. Ruez, OE75:June 75:801
Technique to Develop Atlantic OCS Oil and Gas, W. B. Bleakley, OE75:June 75:830

Oklahoma
Effects of Destratification on Depth Distribution of Fish, Glen E. Gebhart and Robert C. Summerfelt, EE6:Dec 76:1215:12608

One-Dimensional
Strength of One Dimensionally Consolidated Clays, Adel S. Saada and Gary F. Bianchini, GT11:Nov 75:1151:11707

Open Channel Flow
Analytical Solution for 3-D Diffusion Model, Edward Y.T. Kuo, EE4:Aug 76:805:12315
Application of Finite Element Method to Open Channel Flow, Date H. Keuning, HY4:Apr 76:459:12053
Brink Depth for Trapezoidal Broad-Crested Weir, Birendra N. Neogy, HY12:Dec 72:2171:9427
Construction of the 40-Foot Channel in Columbia River, Robert O. Dodge, WW76:Aug 76:259
Dynamic Behavior Model of Ephemeral Stream, Kenneth G. Renard and Emmett M. Laursen, HY5: May 75:511:11315
Effects of Meandering in Alluvial Streams, Yasuo Onishi, Subhash C. Jain and John F. Kennedy, HY7:July 76:899:12248
Experimental Investigation of Flow Over Side Weirs, Ahmed El-Khashab and Kenneth V.H. Smith, HY9: Sept 76:1255:12402
Flow and Bed Topography in Curved Open Channels, Hideo Kikkawa, Syunsuke Ikeda and Akira Kitagawa, HY9:Sept 76:1327:12416
Flow at Grade-Break from Mild to Steep Slopes, Richard G. Weyermuller and M. Gamal Mostafa, HY10:Oct 76:1439:12458
Free Surface Slopes at Controls in Channel Flow, David L. Wilkinson, HY8:Aug 74:1107:10753
Friction Effects on Spatially Varied Open Channel Flows with Increasing Discharge, J. D. Lin, Victor E. Scottron and Hsiang Kuei Soong, WW76:Aug 76:1517
Hydraulic Representation of Flow Cross Sections, Sun-Fu Shih and Robert L. Hamrick, TN: IR1:Mar 76:175:11955
Influence of Equivalent Sand Roughness on the Dispersion Coefficient in Laboratory and Natural Streams, Ho-Shong Hou and Bent A. Christensen, WW76:Aug 76:1179
Maintenance Dredging on the Arkansas River, Tasso Schmidgall, WW76:Aug 76:459
Mathematical Modelling of Rivers with Flood Plains, Miodrag Radojkovic, WW76:Aug 76:56
Mathematical Model to Simulate Channel Deformation, Purshottam Dass and Daryl B. Simons, WW76:Aug 76:1
Movable-Bed Flow Routing in Open Channel and Its Calibration, Chian-Min Wu, WW76:Aug 76:36
Multiple Linearization Flow Routing Model, Thomas N. Keefer and Raul S. McQuivey, HY7:July 74: 1031:10668
Notching River Training Structures: Missouri River, Thomas D. Burke, WW76:Aug 76:1647
Open-Channel Flow Equations Revisited, Ben Chie Yen, EM5:Oct 73:979:10073
Probabilistic Approach to Design of Riprap for River Bank Protection, Ruh-Ming Li, Daryl B. Simons, Paul H. Blinco and Md. Abdus Samad, WW76:Aug 76:1572
Shear Distribution in Bends in Rectangular Channels, Dharam V. Varshney and Ramchandra J. Garde, HY8:Aug 75:1053:11513
Simulation Accuracies of Gradually Varied Flow, J. Peter Jolly and Vujica Yevjevich, HY7:July 74: 1011:10677
Solution for Steady Open Channel Flow, Fred D. Theurer, A. H. Barnes and Everett V. Richardson, WW76:Aug 76:793
Solution for Unsteady Open Channel Flow, Fred D. Theurer, A. H. Barnes and Everett V. Richardson, WW76:Aug 76:1497
Supercritical Flow Over Sills, Karam S. Karki, HY10: Oct 76:1449:12480
Suppression of Waves in Slotted-Walled Channel, Alfred M. Binnie, HY3:Mar 76:397:12006
Theoretical Model of River Ice Jams, Mehmet S. Uzuner and John F. Kennedy, HY9:Sept 76:1365: 12412
Transient Control in Lower Sacramento River, Fred J. Gientke, HY3:Mar 74:405:10418
Transverse Dispersion in Oscillatory Channel Flow, Peter R.B. Ward, HY6:June 74:755:10589
Venturi Flumes for Circular Channels, Mordechai H. Diskin, TN: IR3:Sept 76:383:12369

Openings
Seepage through Opening in Cutoff Wall Under Weir, Suresh P. Brahma, GT3:Mar 75:329:11204
Strength of Beams with Eccentric Reinforced Holes, Tsong-Miin Wang, Robert R. Snell and Peter B. Cooper, ST9:Sept 75:1783:11540

Operating Costs
Discounted Cash Flow Analysis to Select Equipment, Richard Briller, EE3:June 76:595:12190

Operating Costs (Vehicle)
Rail Transit Operating Cost Guidelines, Edward E. Gilcrease, Jr., Walter Kudlick and Manuel Padron, TE2:May 75:365:11314

Operations
Operation and Maintenance of Irrigation and Drainage Systems: Section IV — Maintenance, Richard A. Smith, Chmn., IR1:Mar 76:1:11963
Use of Simulation in Airport Planning and Design, Dana E. Low, TE4:Nov 74:985:10954

Opinion Polls
Future Advances in Soil Placement and Improvement, J. Richard Bell, Preprint No.2775, Sept 76, 19pp.

Optimization
Agricultural Benefit Assessment from Flood Control, Krishan P. Singh, IR76:July 76:264
Approximate Reanalysis Techniques with Substructuring, Ahmed K. Noor and Harold E. Lowder, ST8:Aug 75:1687:11523
Aqueduct Optimization with Intermediate Storage, Jayant Sathaye and Warren A. Hall, IR2:June 76: 249:12180
Computer-Aided Design: Toward an Optimal Design of Concrete Structures, Yogindra N. Anand, Edward J. Rhomberg and Constancio F. Miranda, ST76:Aug 76:1060
Coupled Optimization-Simulation Water Quality Model, A. Bruce Bishop and William J. Grenney, EE5:Oct 76:1071:12452
Design Optimization for Biological Filter Models, Harold E. Gotaas and William S. Galler, EE6:Dec 73:831:10191

Detention Storage Control Strategy Development, Harry G. Wenzel, Jr., John W. Labadie and Neil S. Grigg, WR1:Apr 76:117:12070
Flood Routing in the System of Free Surface Tunnels, Cedo Maksimovic and Miodrag Radojkovic, WW76:Aug 76:190
Frame Optimization Including Frequency Constraints, J. Shamie and Lucien A. Schmit, Jr., ST1:Jan 75:283:11075
Irrigation Timetable Combined with Optimal Operating of an Agricultural Production System, Ilan Amir, Y. Friedman, S. Sharon and A. Ben David, IR76:July 76:192
Iterative Design for Optimal Geometry, William R. Spillers, ST7:July 75:1435:11439
Least Cost Design of Branched Pipe Network System, Arun K. Deb, EE4:Aug 74:821:10711
Minimum Reinforcement of Nonuniform Plates, Robert E. Melchers, EM6:Dec 76:943:12618
Modal Control of Multistory Structures, Charlesworth R. Martin and Tsu T. Soong, EM4: Aug 76:613:12321
Model for Layout and Design of Sewer Systems, Larry W. Mays, Harry G. Wenzel, Jr. and Jon C. Liebman, WR2:Nov 76:385:12580
Models for Scheduling Releases from Multireservoir Systems: A State-of-the-Art Review, Oskar T. Sigvaldson, IR76:July 76:331
Multilevel Approach to Optimum Structural Design, Uri Kirsch, ST4:Apr 75:955:11259
Multistage Optimization of Structures, Lawrence A. Twisdale and Narbey Khachaturian, ST5:May 75: 1005:11297
Nonlinear Optimum Design of Dynamic Damped Frames, Franklin Y. Cheng and Mark E. Botkin, ST3:Mar 76:609:11993
Offshore Platform Reliability — A Parameter Study, Bernhard Stahl and K. A. Blenkarn, ST76:Aug 76: 419
Operations Models for Central Valley Project, Leonard Becker, William W-G. Yeh, Dan M. Fults and Donald Sparks, WR1:Apr 76:101:12062
Optimal Activated Sludge Design under Uncertainty, Arthur R. Tarrer, C. P. Leslie Grady, Jr., Henry C. Lim and Lowell B. Koppel, EE3:June 76:657:12207
Optimal Design of Multiload Multispan Systems, George I.N. Rozvany, TN: EM6:Dec 76:1085: 12591
Optimal Design of Wastewater Collection Systems, J. M. Gupta, S. K. Agarwal and P. Khanna, EE5:Oct 76:1029:12479
Optimally Reinforced Axisymmetric Plates, Robert E. Melchers, EM2:Apr 75:143:11258
Optimal Risk-Based Design of Storm Sewer Networks, Wilson H. Tang, Larry W. Mays and Ben Chie Yen, EE3:June 75:381:11360
Optimal River Cross Sections for Flood Routing, V. Seetharama Rao, Dinshaw N. Contractor and Chinchai Tiyamani, WW76:Aug 76:421
Optimal Substructuring Schemes, Michael O'Rourke and Thomas Bizal, ST76:Aug 76:1037
Optimization in Trusses Using Optimal Control Theory, Narasingam M. Singaraj and Jawalker K. Sridhar Rao, ST5:May 75:1037:11304
Optimization of Denitrification Process, Richard P. Michael and William J. Jewell, EE4:Aug 75:643: 11532
Optimization of Design Capacity of an Aqueduct, Jayant Sathaye and Warren A. Hall, IR3:Sept 76: 295:12396
Optimization of Evaporation Pond Cost, Subhash C. Mehrotra, EE1:Feb 76:165:11942
Optimization of Long-Span Cold-Formed Truss Purlins, Richard T. Douty and James O. Crooker, ST11:Nov 74:2275:10952
Optimization of Unstiffened Hybrid Beams, Ken P. Chong, ST2:Feb 76:401:11907
Optimization of Water Distribution Network Systems, Arun K. Deb, EE4:Aug 76:837:12343
Optimizing Capital Investments in Construction, Donn E. Hancher and David K. Gebert, CO4:Dec 76:629:12606
Optimizing Economic Return on Highway Investment, Robert L. Carstens, TE4:Nov 76:665: 12529
Optimum Design for Infrequent Disturbances, Emilio Rosenblueth, ST9:Sept 76:1807:12433
Optimum Dredged Depth in Inland Waterway, Anatoly B. Hochstein, WW4:Nov 75:331:11698
Optimum Frame Design Using Available Sections, Kuan-Chen Fu and Kuang-Wei You, ST76:Aug 76: 1049
Optimum Pipe Sizing in a Branching Irrigation System, T. Al Austin, Preprint No.2679, Apr 76, 14pp.
Optimum Seismic Design of Linear Shear Buildings, Emilio Rosenblueth and Alejandro Asfura, ST5: May 76:1077:12119
Optimum Structural Design by Dynamic Programming, P. Packia Raj and S. Olani Durrant, ST8:Aug 76:1575:12329
Practical Applications of Structural Optimization, George G. Goble and Fred Moses, ST4:Apr 75:635: 11267
Practical Approach to Code Calibration, Wilfred W.C. Siu, Sree R. Parimi and Niels C. Lind, ST7: July 75:1469:11404
Review of Structural Optimization Techniques, Kenneth F. Reinschmidt, Preprint No.2765, Sept 76, 20pp.
River Water Quality: Simulation Models or Optimization Techniques, Swami Marcondes Villela, WW76:Aug 76:305
Safety Factor Evaluation for Single Piles in Sand, James Neil Kay, GT10:Oct 76:1093:12494
Sewage Chlorination Versus Toxicity -- A Dilemma?, Harvey F. Collins and David G. Deaner, EE6:Dec 73:761:10190
Simplified Optimization of Water Supply System, Hans Jorgen Rasmusen, EE2:Apr 76:313:12026
Simulation of Water Quality Management Policies, John W. Hyden, James A. Chisman and Hugh H. Macaulay, EE4:Aug 75:623:11524
Structural Optimization by Equilibrium Linear Programming, Kenneth F. Reinschmidt and Thanet Norabhoompipat, ST4:Apr 75:919:11219
Tension Leg Platforms: Design and Performance, Dean A. Kypke and Leonardo Perez y Perez, Preprint No.2698, Apr 76, 30pp.
Towards Optimum Design Through Building Codes, Emilio Rosenblueth, ST3:Mar 76:591:11999
Use of Computers in Transmission Tower Design, David L.C. Lo, Andrew Morcos and Surendra K. Goel, ST7:July 75:1443:11410
Variable Energy Ratio Method for Structural Design, James W. Gorzynski and William A. Thornton, ST4:Apr 75:973:11266
Weight Optimization of Plane Trusses, Samuel L. Lipson and Krishna M. Agrawal, ST5:May 74:865: 10521

Optimum Design

Application of Optimal Control Theory to Civil Engineering Structures, Jann-Nan Yang, EM6:Dec 75:819:11812
Models for Scheduling Releases from Multireservoir Systems: A State-of-the-Art Review, Oskar T. Sigvaldson, IR76:July 76:331
Optimal Design of Plane Frames, Jasbir S. Arora, Edward J. Haug, Jr. and Kwan Rim, ST10:Oct 75: 2063:11633
Optimal Slabs and Grillages of Constrained Geometry, George I.N. Rozvany, Chinappa Gangadharaiah and Robin D. Hill, EM6:Dec 75: 755:11797
Optimization in Trusses Using Optimal Control Theory, Narasingam M. Singaraj and Jawalker K. Sridhar Rao, ST5:May 75:1037:11304
Probabilistic Analysis and Design of a Retained Wall, Kaare Hoeg and Ramesh P. Murarka, GT3:Mar 74: 349:10436

Optimum Use

Determining Optimal Well Discharge, Otto J. Helweg, IR3:Sept 75:201:11566

Oregon
Development of Oregon's Hazardous Waste Program, Milan Synak, Patrick H. Wicks and Kenneth H. Spies, EE3:June 75:301:11355
Maintenance Dredging and Four Polychaete Worms, James E. McCauley, Danil R. Hancock and Robert A. Parr, DIEE:Jan 76:673
Oregon Coast Shoreline Changes Due to Jetties, Paul D. Komar, Jose Roman Lizarraga-Arciniega and Thomas A. Terich, WW1:Feb 76:13:11933
Segmental Bridges in Oregon, Louis F. Pierce, TE4: Nov 76:673:12548
Strategic Approach to Estuarine Environmental Management, David A. Bella, WW1:Feb 75:73: 11109

Organic Chlorides
Effects of Temperature and Kelthane on Grass Shrimp, Siamak Khorram and Allen W. Knight, EE5:Oct 76:1043:12475

Organic Coatings
Proven Organic Coatings for Long Term Protection, Abel Banov, CE:Dec 75:54
Proven Organic Coatings for Long Term Protection — Part II, Abel Banov, CE:Feb 76:64

Organic Nitrates
Nitrifying Organism Concentration and Activity, Embar G. Srinath, Raymond C. Loehr and Tata B.S. Prakasam, EE2:Apr 76:449:12041

Organic Silts
Time-Dependent Development of Strength in Dredgings, Raymond J. Krizek and Abdelsalam M. Salem, Preprint No.2640, Apr 76, 28pp.

Organic Soils
Effect of Drainage on the Subsidence of Organic Soil, Ross W. Irwin, IR76:July 76:211

Organizations
Past and Future of Contract Administration, Woodrow W. Wilson, CO3:Sept 75:559:11560

Organization Theory
Propensity of Statewide Multimodel Transportation, William D. Klink and Jason C. Yu, TE4:Nov 75: 639:11710

Organizing
Project Delivery Systems for Construction Projects, Kenath A. Kettle, CO4:Dec 76:575:12594

Orientation
New Procedure for Numerical Relative Orientation, Santosh K. Mahajan, SU2:Nov 74:155:10962

Orthotropic Plate
Buckling Formulas for Corrugated Metal Shear Diaphragms, John T. Easley, ST7:July 75:1403: 11429
Rio-Niteroi Bridge Features Record Girder Span, Gerald F. Fox and H. James Graham, CE:Apr 76: 86
Steel Orthotropic Plates under Alternate Loads, Giulio Ceradini, Carlo Gavarini and Mario P. Petrangeli, ST10:Oct 75:2015:11618

Oscillation
Friction Factor under Oscillatory Waves, J. William Kamphuis, WW2:May 75:135:11292
Hydrodynamic Forces on Cables Subject to Frequency Varied Motion, Robert W. Haas and Richard F. Dominguez, Preprint No.2728, Apr 76, 26pp.
Time-Reversed Unsteady Flow Computations in Waterways, Hsiao-Ling Chu, WW76:Aug 76:1535

Oscillations
Aerodynamic Investigations of In-Line Slender Towers for Heavy Water Plants, K. R. Cooper, H. P.A.H. Irwin and R. L. Wardlaw, ST76:Aug 76:286
Experiments for Accuracy and Stability of Heat Conduction, Rao Yalamanchili, NMG:June 76:I-93
Hydrodynamic Forces and Moments for Oscillating Cylinders, Yong Kwun Chung and Martha I. Coleman, OE75:June 75:899
Oscillations in Harbors Containing Islands, Jiin-Jen Lee, OE75:June 75:632
Oscillations in Surge Tanks, Mohammad Akram Gill, HY10:Oct 74:1369:10891
Vortex-Excited Oscillations of Elastic Cylinders, Richard A. Skop and Owen M. Griffin, OE75:June 75:535

Oscillators
Approximate Method for Nonlinear Random Vibration, Yi-Kwei Wen, EM4:Aug 75:389:11500
Maximum Response Statistics for Yielding Oscillator, Nilesh C. Chokshi and Loren D. Lutes, EM6:Dec 76:983:12632

Outfall Sewers
Determination of Length and Direction of Ocean Outfall Diffuser at Wantagh Sewage Treatment Plant, Nassau County, New York, Wen H. Huang, OE75:June 75:1294
DO-Sag in Oscillating Flow, Wen-Hsiung Li and Michael Edwin Kozlowski, EE4:Aug 74:837:10713
Environmental Design for Istanbul Sewage Disposal, Charles G. Gunnerson, EE1:Feb 74:101:10343
Fate of Metals in Wastewater Discharge to Ocean, Naresh K. Rohatgi and Kenneth Y. Chen, EE3: June 76:675:12194
Impact on Marine Benthos of Waste Water Discharge, Gerald T. Orlob and Dennis A. O'Leary, Preprint No.2658, Apr 76, 25pp.
A Model for Trace Metals from Marine Outfalls, T. J. Hendricks, OE75:June 75:1353
Ocean Disposal of Waste Workshop, Donald J. Baumgartner and Robert B. Biggs, OE75:June 75: 1357
Polyethylene Pipe Solutions to Sewer Outfalls, Donald R. Wells, CE:Sept 76:62

Outflows
Interaction of Multiple Jets with Ambient Current, Ralph R. Boericke, HY4:Apr 75:357:11247

Outlet Works
Cavitation Control by Aeration of High-Velocity Jets, Glenn L. Beichley and Danny L. King, HY7:July 75:829:11462
Hydraulic Design for an Outlet Structure, Clifford D. Smith, WW76:Aug 76:1019
Outlet Drainage — An Assessment of Environmental Effects, J. C. Day, R. F. Brady and M. J. Staite, IR76:July 76:445

Overconsolidation
Anisotropy in Heavily Overconsolidated Kaolin, Srinath F. Amerasinghe and Richard H.G. Parry, GT12:Dec 75:1277:11808
Engineering Behavior of Calcareous Clays, Vito A. Nacci, Mian-Chang Wang and Kenneth R. Demars, OE75:June 75:380

Overflow
Theory of Storage and Treatment-Plant Overflows, Charles D.D. Howard, EE4:Aug 76:709:12310
Vortex Suppression in Stilling Pond Overflow, Y. R. Reddy and John Pickford, HY11:Nov 74:1685: 10969

Overflows
Urban Runoff Pollution Control—State-of-the-Art, Richard Field and John A. Lager, EE1:Feb 75:107: 11129

Overland Flow
Hydraulics of Sheet Flow in Wetlands, Bent A. Christensen, WW76:Aug 76:746
Time of Concentration of Overland Flow, Vulli L. Gupta and Peter J. Sinclair, TN: HY4:Apr 76:547: 12018

Overloads
Fatigue of Periodically Overloaded Stiffener Detail, Ali Abtahi, Pedro Albrecht and George R. Irwin, ST11:Nov 76:2103:12516

Overpressure
Elastic and Elasto-Plastic Computerized Dynamic Analysis of Frame Structures Subjected to Blast Overpressure, George S. Tseng, William Stea, Samuel Weissman, Norval Dobbs and Paul Price, ST76:Aug 76:977

Overturning Tests
Soil Pressure and Overturning Analyses of Structures Under Three Directional Seismic Loads by Using SRSS Combination, Frank J. Hsiu, STN75:Dec 75: II-331

Oxidation
Dye Catalyzed Oxidation of Industrial Wastes, Jerome W. Sargent and Robert L. Sanks, EE5:Oct 76:879:12453
Reclamation of Wood-Chip Carrier Water, Joe M. Shane, Neil S. Hawthorne and Takashi Asano, EE2:Apr 75:215:11231

Oxidation Reduction Reactions
Physicochemical Parameters that Regulate Mobilization and Immobilization of Toxic Heavy Metals, Robert P. Gambrell, Rashid A. Khalid and W. H. Patrick, Jr., DIEE:Jan 76:418

Oxygenation
Comparative Study With Costs of Hypolimnetic Aeration, Arlo W. Fast, Marc W. Lorenzen and J. Harlan Glenn, EE6:Dec 76:1175:12629
Philadelphia Pilots--Builds Oxygen Activated Sludge, Carmen F. Guarino, Michael D. Nelson and Allan B. Edwards, EE4:Aug 74:919:10722
Reaeration and Velocity Prediction for Small Streams, Edward G. Foree, EE5:Oct 76:937:12448
Simulation of Water Quality in Tarawera River, J. Christopher Rutherford and Michael J. O'Sullivan, EE2:Apr 74:369:10461
Synoptic Survey of Hypolimnetic Aeration, Arlo W. Fast and Marc W. Lorenzen, EE6:Dec 76:1161: 12628

Oxygen Consumption
Oxygen Depletion and Sulfate Production in Strip Mine Spoil Dams, J. H. Amend, Dinshaw N. Contractor and Chandrakant S. Desai, NMG:June 76:II-1155
Oxygen Transfer at High Solids Concentrations, Dale R. Baker, Raymond C. Loehr and Arthur C. Anthonisen, EE5:Oct 75:759:11641

Oxygen Demand
Analysis of Oxygen Demand of Sediments, J. Clement Burdick, III, DIEE:Jan 76:319
Effects of Shock Temperature on Biological Systems, John L. Carter and William F. Barry, EE2:Apr 75: 229:11239

Oxygen Transport Mechanisms
Oxygen Transfer at High Solids Concentrations, Dale R. Baker, Raymond C. Loehr and Arthur C. Anthonisen, EE5:Oct 75:759:11641
Some Features of Wind Action on Shallow Lakes, Robert B. Banks, EE5:Oct 75:813:11640

Oysters
Sediment and Elutriate Toxicity to Oyster Larvae, Rick D. Cardwell, Charles E. Woelke, Mark I. Carr and Eugene W. Sanborn, DIEE:Jan 76:684

Ozone
Wastewater Ozonation: A Process Whose Time Has Come, Harvey M. Rosen, CE:Mar 76:65
What's New in Water Treatment?, Virginia Fairweather, CE:Sept 75:69

Pack Ice
Calculations to Test a Pack Ice Model, Max D. Coon, Roger Colony, Robert S. Pritchard and D. A. Rothrock, NMG:June 76:II-1210

Painting
Proven Organic Coatings for Long Term Protection, Abel Banov, CE:Dec 75:54
Proven Organic Coatings for Long Term Protection — Part II, Abel Banov, CE:Feb 76:64

Paints
Zinc Paint Can Save $500,000 On Your Powerplant, Dean M. Berger, CE:Oct 76:66

Pakistan
Analysis of Bed Profiles in Sand Bed Canals, Khalid Mahmood and Hassan Ahmadi-Karvigh, WW76: Aug 76:564
Field Research in Large Sand Bed Channels, Khalid Mahmood and Riaz Nazir Tarar, WW76:Aug 76: 1318
Flood Control in the Province of the Punjab (Pakistan), S. M. Ayoob and Wali Muhammad Choudhry, WW76:Aug 76:1071
Initial Operation of the Pakistan Link Canals, Lyman R. Flook, Jr., WW76:Aug 76:1737
Meandering Thalwegs in Straight Alluvial Channels, V. Miguel Ponce and Khalid Mahmood, WW76: Aug 76:1418
Procedural Errors in Alluvial Channel Measurements, Tariq Masood, Khalid Mahmood and M. M. Siddiqui, WW76:Aug 76:591
Revival of Inland Navigation in Pakistan, Irshad Ahmad, WW76:Aug 76:84
Some Construction Aspects of Tarbela Dam, Morgan H. Thompson, CO3:Sept 74:247:10799
Variation of Suspended Sediment in Sand Bed Canals, Gary L. Eyster and Khalid Mahmood, WW76:Aug 76:924
Water Management in Indus River System, Riaz Nazir Tarar, WW76:Aug 76:813

Paleontology
Historical Sites and the Construction Engineer, Mario G. Salvadori, CO2:June 76:295:12183

Panama Canal
The Forgotten Engineer: John Stevens and the Panama Canal, Virginia Fairweather, CE:Feb 75:54

Panels
Design of I-Shaped Beams with Diaphragm Bracing, Samuel J. Errera and Tamirisa V.S.R. Apparao, ST4:Apr 76:769:12051
Shear of Light-Gage Partitions in Tall Buildings, Wagih M. El-Dakhakhni, ST7:July 76:1431:12257
Wood Shear Panels Bonded with Flexible Adhesives, John A. Richards, Robert P. Kerfoot and Gordon P. Krueger, ST1:Jan 75:131:11056

Pan Evaporation
Intercontinental Comparison of Evaporation Estimates, Robert D. Burman, IR1:Mar 76:109: 11958

Parameters
Atmospheric Reaeration in a River Using Productivity Analysis, George M. Hornberger and Mahlon G. Kelly, EE5:Oct 75:729:11644

Parametric Equations
Laplacian-Isoparametric Grid Generation Scheme, Leonard R. Herrmann, EM5:Oct 76:749:12456
Optimum Structural Design with Dynamic Constraints, Juan H. Cassis and Lucien A. Schmit, Jr., ST10:Oct 76:2053:12491

Parking
Apparel-Goods Movement Process, Sam Kahan, Carl M. Berkowitz and Walter H. Kraft, TE3:Aug 76: 507:12298

The Impact of Office Space and Parking Distribution on Commuter Modal Choice, Joseph J. McCourt and William C. Miller, Preprint No.2790, Sept 76, 26pp.
Masjid (Mosque) Planning, Altaf Hussain, UP1:Aug 76:171:12348
Parking — First Stage in Downtown Redevelopment, Richard S. Beebe, Preprint No.2780, Sept 76, 10pp.
Poor Parking — Detrimental to Bicycling Growth, Artemas Ginzton, BP75:Dec 75:300

Parking Areas
Hydrology of Porous Pavement Parking Lots, Thomas J. Jackson and Robert M. Ragan, HY12: Dec 74:1739:11010
Poor Parking — Detrimental to Bicycling Growth, Artemas Ginzton, BP75:Dec 75:300

Parking Facilities
The Impact of Office Space and Parking Distribution on Commuter Modal Choice, Joseph J. McCourt and William C. Miller, Preprint No.2790, Sept 76, 26pp.
Parking and Zoning, David K. Witheford, UP1:May 75:1:11294
Parking — First Stage in Downtown Redevelopment, Richard S. Beebe, Preprint No.2780, Sept 76, 10pp.
Poor Parking — Detrimental to Bicycling Growth, Artemas Ginzton, BP75:Dec 75:300
Public Response to Carpooling Programs, Alice E. Kidder, Bruce Morgan and Arthur Saltzman, TE3: Aug 76:571:12340
San Francisco Bay Area Parking Management Plan, John B. Peers and Oreste M. Bevilacqua, TE4:Nov 76:821:12544
Structural Design and Analysis of Atlanta Center, Ltd., Stephen J. Campbell and Bill L. Gunnin, ST76:Aug 76:771

Parking Garages
La Guardia Airport Parking and Terminal Frontage Structure, Eugene J. Fasullo, CE:Mar 76:53

Parking Regulations
San Francisco Bay Area Parking Management Plan, John B. Peers and Oreste M. Bevilacqua, TE4:Nov 76:821:12544

Parking Techniques
San Francisco Bay Area Parking Management Plan, John B. Peers and Oreste M. Bevilacqua, TE4:Nov 76:821:12544
Washington Metro Access Facilities, Mark M. Akins, CE:July 75:63

Parks
Kingwood: A Non-Assisted Private Suburban Development, Daniel B. Stauffer, Preprint No.2656, Apr 76, 26pp.
Maintaining Water Quality in Voyageurs National Park, William H. Anderl, Preprint No.2686, Apr 76, 14pp.
Water Recreation and Benefit Estimation for Lake Livingston (Texas), Charles W. Warner, Jr., Pat B. Fowler, G. E. Munger, Jr. and Jerry R. Rogers, Preprint No.2682, Apr 76, 16pp.

Partial Differential Equations
Mathematical Aspects of Surface Runoff, Vijay P. Singh, WW76:Aug 76:773

Participative Management
Management Issues in the U.S. Construction Industry, Janet Ann Koch Rossow and Fred Moavenzadeh, CO2:June 76:277:12184

Particle Spectra
Micromechanics Model for Creep of Anisotropic Clay, Zdenek P. Bazant, I. Kutay Ozaydin and Raymond J. Krizek, EM1:Feb 75:57:11138

Particulate Air Pollutants
Flue Gas Scrubbing at Eddystone Station, George Kotnick, Preprint No.2779, Sept 76, 24pp.
Vegetation and Urban Environment, Asadullah Zulfacar, UP1:May 75:21:11283

Partitions (Mathematics)
Systematic Substructuring, Senol Utku, ST4:Apr 75: 717:11244

Passenger Attitudes
Ventilated Approach Regions for Railway Tunnels, Alan E. Vardy, TE4:Nov 75:609:11691

Passenger Terminals
Air Passenger Handling Facilities: Future Planning-Design Impacts, Hanan A. Kivett, Chmn., TE3:Aug 76:461:12289
Staging of Improvements to Air Transport Terminals, Angus J. McKenzie, Jack W.E. Huggett and Kenneth W. Ogden, TE4:Nov 74:855:10920

Passenger Transportation
Automated Ground Transportation System Stations with Multiple Loading Positions, Dietrich R. Bergmann, TE2:May 75:383:11328
The Auto Restricted Zone/Multi-User Vehicle Systems Study: A Status Report, Beth Irons French and William S. Herald, BP75:Dec 75:197
Case Study of Carless Mobility Constraints, K. C. Koutsopoulos and Vasant H. Surti, TE4:Nov 76: 745:12566
A Communications Project — D/FW Airport, Jack D. Downey, EFAN:Dec 74:168
Computer Location of Bikeways, William L. Smith and Jerry S. Murphy, BP75:Dec 75:66
Design of the D/FW Airport Terminals for the Public, Tom Bear, EFAN:Dec 74:197
Economic Evaluation Techniques for Bicycle-Pedestrian Systems: A Case Study, Jack Dorman and Michael Everett, BP75:Dec 75:454
Factors Affecting Reliability of Urban Bus Services, Brian P. Sterman and Joseph L. Schofer, TE1:Feb 76:147:11930
Illinois: First Steps in Bikeway Development, Jim Kashmier, BP75:Dec 75:75
Intercity Systems, Jerry D. Ward, Preprint No.2769, Sept 76, 17pp.
Issues and Answers in Bikeway System Development, Larry L. Lucero, BP75:Dec 75:54
Multilane Passenger Conveyors, Edward W. Walbridge, TE3:Aug 75:463:11485
Paratransit: How You May Get Around if the Energy Shortage Takes You Out of Your Car, CE: Oct 75:84
The Role of the Bicycle, James J. Berryhill, BP75: Dec 75:33
The Second Most Frequent Mode of Transportation, Bruce T. Caine and Robert L. Siegel, BP75:Dec 75: 41
Summary — Case Study of Dallas/Fort Worth Airport, Jack D. Downey, EFAN:Dec 74:165
A Survey of Class I Bikeway Pavements, Thomas H. Crawford, R. Gary Hicks, James J. Berryhill and James S. Lai, BP75:Dec 75:278
Synthesizing Taxicab Improvements, Joseph C. Corradino, TE4:Nov 76:793:12545
Whither Goest the Bikeway Boom?, Charles F. Floyd, BP75:Dec 75:471
The Wrong Way is Sometimes the Right Way, Marshall Suloway, Preprint No.2697, Apr 76, 18pp.

Patients
Some Insights into the Behavioral Evaluation of Hospitals; Results of Three Studies, Wayne D. Veneklasen, Kevin E. Coray and Sue D. Pendell, EFAN:Dec 74:127
Summary for Session III—Health Delivery Systems, Jack L. Mahan, Jr., EFAN:Dec 74:252

Pattern Recognition
Satellite Observations of Water Quality, Graham P. Harris, Robert P. Bukata and J. Edward Bruton, TE3:Aug 76:537:12300

Pavement Bases
Fly Ash Pavements, Run Ways to Take Off?, Virginia Fairweather and Marvin L. Byington, CE:Aug 75: 57
Need for Estimated Cement Requirements for Stabilizing Lateritic Soils, Samuel A. Ola, TE2:May 74:379:10534

Pavement Loading
Fly Ash Pavements, Run Ways to Take Off?, Virginia Fairweather and Marvin L. Byington, CE:Aug 75: 57

Pavement Overlays
Numerical Analysis of Thermal Crack Propagation in Pavement Overlays, H. S. Chang, Robert L. Lytton and S. H. Carpenter, NMG:June 76:1-526
Pavement Applications for Steel Fibrous Concrete, David R. Lankard and Alvin J. Walker, TE1:Feb 75:137:11108

Pavements
Airport Upgrading Versus Landing Gear Optimization, Fletcher H. Griffis and M. A. Gammon, TE2:May 76:313:12137
American Road Building - Fifty Years of Progress, Herbert W. Busching and Randolph Russell, CO3: Sept 75:565:11577
Cumulative Deflection and Pavement Performance, William H. Highter and Milton E. Harr, TE3:Aug 75:537:11507
Fly Ash Pavements, Run Ways to Take Off?, Virginia Fairweather and Marvin L. Byington, CE:Aug 75: 57
Fracture of Pavement Materials, Geoffrey E. Blight, TE4:Nov 73:801:10139
Landmarks Attest CE Contribution to Progress, CE: Aug 76:76
Maintenance Management Aids, Eugene L. Marvin, Preprint No.2637, Apr 76, 25pp.
Migration of Subgrade Salts Damages Thin Pavements, Geoffrey E. Blight, TE4:Nov 76:779: 12542
New and Conventional Engineering Uses of Fly Ash, Ramesh C. Joshi, Donald M. Duncan and Howard M. McMaster, TE4:Nov 75:791:11730
Numerical Analysis of Rigid Pavement Resting over Hookean Subgrade Continuum, Madan G. Arora and Sudarshan K. Khanna, NMG:June 76:1-511
Pavement Applications for Steel Fibrous Concrete, David R. Lankard and Alvin J. Walker, TE1:Feb 75:137:11108
Practical Refuse Recycling, C. Edward Walter, EE1: Feb 76:139:11941
Significance of Variably Confined Triaxial Testing, John J. Allen and Marshall R. Thompson, TE4:Nov 74:827:10911
Slipform Pavers Prove Their Versatility, Gordon K. Ray, Edwin C. Lokken and Robert G. Packard, TE4:Nov 75:721:11725
A Survey of Class I Bikeway Pavements, Thomas H. Crawford, R. Gary Hicks, James J. Berryhill and James S. Lai, BP75:Dec 75:278
Transportation Energy Considerations, Alexander French, TE1:Feb 76:27:11919

Pavement Wear
Airport Upgrading Versus Landing Gear Optimization, Fletcher H. Griffis and M. A. Gammon, TE2:May 76:313:12137

Peak Hour Traffic
Peak-Hour Transit Routing, Stanley D. Peterson and Eugene M. Wilson, TE4:Nov 76:847:12547

Peak Runoff
Surface Runoff Hydrograph Equation, Vulli L. Gupta and Syed Afaq Moin, HY10:Oct 74:1353:10880

Peat
Consolidation of Fibrous Peat, Peter L. Berry and Brian Vickers, GT8:Aug 75:741:11493

Pedestrian Behavior
Pedestrian Behavior: A Study of the Organization of Co-Active Behavior, Ronald Goodrich, BP75:Dec 75:374
Pedestrianization of the Central City, Harold Lewis Malt, BP75:Dec 75:214
Pedestrian Versus Bicycle Versus Automobile — A Case Study, John M. Wright, BP75:Dec 75:172
Planning for Pedestrianways, Niva S. Oghigian, BP75:Dec 75:103
Planning Pedestrian Environments — A Computer Simulation Model, William Boles, BP75:Dec 75:224
Planning the Successful Pedestrian Mall: The Allentown Mall, Paul W. Zambo, BP75:Dec 75:109
Security, Safety and Related Aspects of Pedestrian Design for the New Eleventh Street Station of the Philadelphia Center City Commuter Rail Connection, Simon M. Langberg, BP75:Dec 75:516
Skyways in Minneapolis/St. Paul: Prototypes for the Nation?, C. Todd Heglund and Richard C. Podolske, BP75:Dec 75:482

Pedestrian Bridges
Stress Ribbon Bridge in Freiburg, Germany, Man-Chung Tang, CE:May 76:75

Pedestrian Characteristics
Planning for Pedestrianways, Niva S. Oghigian, BP75:Dec 75:103
Planning the Successful Pedestrian Mall: The Allentown Mall, Paul W. Zambo, BP75:Dec 75:109
The Role of the Pedestrian, John J. Fruin, BP75:Dec 75:26

Pedestrian Control
Location and Capacity of Unsignalized Exits, Ezra Hauer, TE2:May 75:179:11291

Pedestrian Malls
Bikes and Malls, Harold Katner, BP75:Dec 75:4
Conference Review and Evaluation, David G. Ellingson, EFAN:Dec 74:287
Maintenance of Delivery Services for Chicago's State Street Transit Mall, Thomas P. Kaeser, BP75:Dec 75:528
Nicollet Avenue Case Study, Rodney E. Engelen, EFAN12:Dec 74:231
Nicollet Avenue Case Study, Rodney E. Engelen, Preprint No.2672, Apr 76, 14pp.
Peachtree City Path Experience: Conception to Implementation, Edwin R. Koons, BP75:Dec 75: 186
Planning and Implementation of the Chestnut Street Transitway, William J. Grabske and Richard K. Faris, Preprint No.2803, Sept 76, 23pp.
Planning the Successful Pedestrian Mall: The Allentown Mall, Paul W. Zambo, BP75:Dec 75:109
Reporter's Summary for Session VI—Summary Session, Cabell Gwathmey, EFAN:Dec 74:292
Reporter's Summary of Discussions for Session V — Center City Malls, Jack L. Mahan, Jr., EFAN:Dec 74:278
Skyways in Minneapolis/St. Paul: Prototypes for the Nation?, C. Todd Heglund and Richard C. Podolske, BP75:Dec 75:482
Summary for Session V—Case Study of a Central City Mall, Rodney E. Engelen, EFAN:Dec 74:275

Pedestrian Regulations
Opening Remarks — Pedestrian/Bicycle Facilities, Robert E. Cron, Jr., BP75:Dec 75:1

Pedestrians
Benefits of Separating Pedestrians and Vehicles, Ronald L. Braun and Marc F. Roddin, BP75:Dec 75:406
Bike and Pedestrian Pathways, CE:Nov 75:72
The Current Status of Transportation Control Plans, Gary Hawthorn, BP75:Dec 75:557
Economic Evaluation Techniques for Bicycle-Pedestrian Systems: A Case Study, Jack Dorman and Michael Everett, BP75:Dec 75:454

Education and Enforcement — The Sine Qua Non of the New Traffic-Mix, Larry Wuellner, BP75:Dec 75:548
Grantspersonship Roundtable Minutes, Ira N. Pierce, BP75:Dec 75:587
Issues and Answers in Bikeway System Development, Larry L. Lucero, BP75:Dec 75:54
Location and Capacity of Unsignalized Exits, Ezra Hauer, TE2:May 75:179:11291
Nicollet Avenue Case Study, Rodney E. Engelen, EFAN12:Dec 74:231
Nicollet Avenue Case Study, Rodney E. Engelen, Preprint No.2672, Apr 76, 14pp.
Opening Remarks — Pedestrian/Bicycle Facilities, Robert E. Cron, Jr., BP75:Dec 75:1
Peachtree City Path Experience: Conception to Implementation, Edwin R. Koons, BP75:Dec 75:186
Pedestrian Behavior: A Study of the Organization of Co-Active Behavior, Ronald Goodrich, BP75:Dec 75:374
Pedestrianization of the Central City, Harold Lewis Malt, BP75:Dec 75:214
Pedestrian Versus Bicycle Versus Automobile — A Case Study, John M. Wright, BP75:Dec 75:172
Planning for Pedestrianways, Niva S. Oghigian, BP75:Dec 75:103
Planning Pedestrian Environments — A Computer Simulation Model, William Boles, BP75:Dec 75:224
Planning Pedestrian Systems for a Prototype New Town in Colombia, John B. Frazier, BP75:Dec 75:245
Resolutions Adopted at the Fourth National Seminar on the Planning, Design and Implementation of Bicycle and Pedestrian Facilities, Elizabeth A. Drake, BP75:Dec 75:591
The Role of the Pedestrian, John J. Fruin, BP75:Dec 75:26
Security, Safety and Related Aspects of Pedestrian Design for the New Eleventh Street Station of the Philadelphia Center City Commuter Rail Connection, Simon M. Langberg, BP75:Dec 75:516
Skyways in Minneapolis/St. Paul: Prototypes for the Nation?, C. Todd Heglund and Richard C. Podolske, BP75:Dec 75:482
Summary for Session V—Case Study of a Central City Mall, Rodney E. Engelen, EFAN:Dec 74:275
Types of Street Use in New Orleans, John F. Exnicios, BP75:Dec 75:10
Young Pedestrian Safety (The School Walking Trip), Martin L. Reiss and H. Douglas Robertson, BP75:Dec 75:389

Pedestrian Safety

Benefits of Separating Pedestrians and Vehicles, Ronald L. Braun and Marc F. Roddin, BP75:Dec 75:406
The Current Status of Transportation Control Plans, Gary Hawthorn, BP75:Dec 75:557
Education and Enforcement — The Sine Qua Non of the New Traffic-Mix, Larry Wuellner, BP75:Dec 75:548
Nighttime Visibility Through Retro-Reflective Materials, Robert A. Isaksen, BP75:Dec 75:426
Pedestrian Behavior: A Study of the Organization of Co-Active Behavior, Ronald Goodrich, BP75:Dec 75:374
Pedestrianization of the Central City, Harold Lewis Malt, BP75:Dec 75:214
Security, Safety and Related Aspects of Pedestrian Design for the New Eleventh Street Station of the Philadelphia Center City Commuter Rail Connection, Simon M. Langberg, BP75:Dec 75:516
The Wrong Way Is Sometimes the Right Way, Marshall Suloway, TE4:Nov 76:617:12518
Young Pedestrian Safety (The School Walking Trip), Martin L. Reiss and H. Douglas Robertson, BP75:Dec 75:389

Pedestrian Traffic Flow

Maintenance of Delivery Services for Chicago's State Street Transit Mall, Thomas P. Kaeser, BP75:Dec 75:528
Planning for Pedestrianways, Niva S. Oghigian, BP75:Dec 75:103
Skyways in Minneapolis/St. Paul: Prototypes for the Nation?, C. Todd Heglund and Richard C. Podolske, BP75:Dec 75:482

Pedestrian Vehicle Interface

Location and Capacity of Unsignalized Exits, Ezra Hauer, TE2:May 75:179:11291

Penetration

Cone Penetration of Granular and Cohesive Soils, Raymond N. Yong and Choong-Kong Chen, EM2:Apr 76:345:12081
Laboratory Standard Penetration Tests on Fine Sands, William F. Marcuson, III and Wayne A. Bieganousky, Preprint No.2752, Sept 76, 30pp.
Missile Penetration, Chang-ning Sun, Edwin G. Burdette and Robert O. Barnett, TN: ST5:May 76:1141:12128
Quasi-Static Deep Penetration in Clays, Mohsen M. Baligh and Ronald F. Scott, GT11:Nov 75:1119:11706

Penetration Resistance

Laboratory Standard Penetration Tests on Fine Sands, William F. Marcuson, III and Wayne A. Bieganousky, Preprint No.2752, Sept 76, 30pp.
Projectile Penetration of Elastic-Plastic Earth Media, Lewis Thigpen, GT3:Mar 74:279:10414
Quasi-Static Deep Penetration in Clays, Mohsen M. Baligh and Ronald F. Scott, GT11:Nov 75:1119:11706

Penetration Tests

Correlations Between Vane Shear Strength and Cone Resistance in Some Norwegian Soft Clays, Tom Lunne, GT75:June 75:II-161
In Situ Measurement of Volume Change Characteristics, James K. Mitchell and William S. Gardner, GT75:June 75:II-279
Liquefaction Considerations in Nuclear Plant Design, Joseph L. Ehasz, Jr. and William F. Mercurio, STN75:Dec 75:II-142
Massive Compaction of Granular Soil — How We Stand, Henry W. Janes and Robert D. Anderson, Preprint No.2777, Sept 76, 28pp.
Measurement of In Situ Strength, John H. Schmertmann, GT75:June 75:II-57
Missile Penetration, Chang-ning Sun, Edwin G. Burdette and Robert O. Barnett, TN: ST5:May 76:1141:12128
Site Investigation with Static Cone Penetrometer, Robert Alperstein and Samuel A. Leifer, GT5:May 76:539:12154
Statistics of Liquefaction and SPT Results, John T. Christian and William F. Swiger, GT11:Nov 75:1135:11701
Underwater Placement of Sand Fill at Port of Portland Terminal #6, Loren R. Anderson and John Ramage, Preprint No.2718, Apr 76, 20pp.
Vibroflotation Compaction of Granular Hydraulic Fills, Ralph E. Brown, Preprint No.2657, Apr 76, 30pp.

Penetrometers

In-Situ Undrained Shear Strength of Two Marine Clays, Demetrious Koutsoftas and Joseph A. Fischer, GT9:Sept 76:989:12431

Pennsylvania

Automated Hydrography in the Philadelphia District, Henry R. Spies, Preprint No.2764, Sept 76, 14pp.
Benjamin Latrobe: Helping Cleanse America, CE:July 76:80
Complex Source Regulation in Philadelphia, William C. Miller, Preprint No.2778, Sept 76, 24pp.
Comprehensive Water Quality Management Planning, Kenneth A. Bartal and Leonardo V. Gutierrez, Jr., HY4:Apr 75:371:11263
Conowingo-Peach Bottom Energy Complex: Financial, Legal and Public Relations Aspects, W. H. Johnson, EFEEC:Aug 75:292

Flood Control for an Island Sited Nuclear Plant, Joel L. Caves, WW76:Aug 76:872
Flue Gas Scrubbing at Eddystone Station, George Kotnick, Preprint No.2779, Sept 76, 24pp.
Foundation Treatment for Little Blue Run Dam, Gerald R. Thiers, Larry W. Lobdell and Bernard M. Mihalcin, GT76:Aug 76:283
The Impact of Office Space and Parking Distribution on Commuter Modal Choice, Joseph J. McCourt and William C. Miller, Preprint No.2790, Sept 76, 26pp.
Mahoning Dam Foundation Reevaluation, James V. Hamel, Stuart B. Long and Harry F. Ferguson, GT76:Aug 76:217
Operation Scarlift — Mine Drainage Abatement, Clifford H. McConnell, Donald E. Fowler and Andrew E. Friedrich, Preprint No.2770, Sept 76, 30pp.
Performance of Pennsylvania Highway Drainage Inlets, Arthur W. Brune, Walter H. Graf, Erik Appel and Peter P. Yee, HY12:Dec 75:1519:11801
Planning and Implementation of the Chestnut Street Transitway, William J. Grabske and Richard K. Faris, Preprint No.2803, Sept 76, 23pp.
Planning the Successful Pedestrian Mall: The Allentown Mall, Paul W. Zambo, BP75:Dec 75:109
Prediction of Flood Volume from Small Humid Region Watersheds, Sie Ling Chiang, HY7:July 75:817:11466
Security, Safety and Related Aspects of Pedestrian Design for the New Eleventh Street Station of the Philadelphia Center City Commuter Rail Connection, Simon M. Langberg, BP75:Dec 75:516
Sediment Control during Highway Construction in Central Pennsylvania, Lloyd A. Reed, IR76:July 76:497
The Three Ages of Philadelphia, Kneeland A. Godfrey, Jr., CE:July 76:44

Pensions

How to Save for Retirement and Cut Income Tax, CE:Mar 76:70

Penstocks

Construction of Grand Coulee Third Power Plant, Donald J. Duck, CO4:Dec 75:869:11774
A History of Bureau of Reclamation Construction-Part I, Harold G. Arthur, CO1:Mar 75:51:11189

People Movers

Multilane Passenger Conveyors, Edward W. Walbridge, TE3:Aug 75:463:11485

Perforating

Shear Buckling of Square Perforated Plates, John F. Grosskurth, Jr., Richard N. White and Richard H. Gallagher, EM6:Dec 76:1025:12641

Performance

Measuring Transportation System Performance, Thomas R. Mongan, N. J. Nielsen and J. R. Formby, TE3:Aug 75:437:11483
One Owners Dam Safety Program and Its Application Under Government Regulations, Thomas A. Kelly, EFRLD:Sept 75:105

Performance Evaluation

Productivity Improvements Achieved in Navy Public Works Operations, Albert R. Marschall, PROD:Aug 76:135

Performance Standards

A Performance Standard for Foundations and Excavations, Felix Y. Yokel, CE:Oct 76:80

Permafrost

Basic Construction Principles in Higher Latitudes, Shu-T'ien Li, CO1:Mar 74:33:10399
Geotechnical Aspects of Trans-Alaska Pipeline, Ulrich Luscher, William T. Black and Keshavan Nair, TE4:Nov 75:669:11722
How the Soviets Build on Permafrost, Leonard LeSchack and Reuben Kachadoorian, CE:Apr 75:57
Off-Highway Transportation in the Arctic, Arthur D. Anderson, CE:Mar 76:72
Soil-Moisture-Temperature for Alaskan Lowland, Gary L. Guymon, IR3:Sept 75:187:11562
Summer Moisture-Temperature for Arctic Tundra, Gary L. Guymon, IR4:Dec 76:403:12613

Permeability

Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, WW4:Nov 76:455:12561
Consolidation of Fibrous Peat, Peter L. Berry and Brian Vickers, GT8:Aug 75:741:11493
Consolidation of Thick Beds of Clay, Pasquale De Simone and Carlo Viggiani, NMG:June 76:II-1067
Dewatering Rock for Construction, George F. Sowers, GT76:Aug 76:200
Field Measurement of Permeability in Soil and Rock, Victor Milligan, GT75:June 75:II-3
Finite Element Analysis of Grout Propagation, Manfred Wallner and Walter Wittke, NMG:June 76:II-1119
Foundation Treatment for Little Blue Run Dam, Gerald R. Thiers, Larry W. Lobdell and Bernard M. Mihalcin, GT76:Aug 76:283
Fundamentals of Piping, Richard F. Flanagan, Preprint No.2766, Sept 76, 18pp.
Infiltration Into Increasingly Permeable Soils, Herman Bouwer, IR1:Mar 76:127:11959
Migration of Subgrade Salts Damages Thin Pavements, Geoffrey E. Blight, TE4:Nov 76:779:12542
Modeling the Chipuxet Ground Water Aquifer, William E. Kelly, NMG:June 76:II-1188
Performance of Single Household Treatment Units, Richard J. Otis and William C. Boyle, EE1:Feb 76:175:11895
Stability of Trenches Filled with Fluids, Kevin L. Nash, CO4:Dec 74:533:11006
Studies on Seepage from Canals with Partial Lining, Kanakatti Subramanya, Madhira Radha Madhav and Govinda Chandra Mishra, HY12:Dec 73:2333:10197
Water Quality and Aquitard Permeability, James H. Hardcastle and James K. Mitchell, IR2:June 76:205:12203
3-D Finite Element Analysis of a Dam Foundation, Walter Wittke and Stephen Semprich, NMG:June 76:III-1385

Permeability Tests

Earth Pressures Measured with Hydraulic Piezometers, A. D.M. Penman, GT75:June 75:II-361
In Situ Measurement of Soil Properties, Harvey E. Wahls, Chmn., GT75:June 75
In Situ Measurement of Volume Change Characteristics, James K. Mitchell and William S. Gardner, GT75:June 75:II-279

Permits

Economic Impact of Dredging Regulations, Frank C. Boerger and Michael H. Cheney, DIEE:Jan 76:408
Legislative Impact of P.L. 92-500 on Dredging, David H. Webb and Alfred P. Holmes, Jr., DIEE:Jan 76:83
Liability Considerations in State Dam Permit and Inspection Programs (A Look at Ohio's Program), Roy Winkle, EFRLD:Sept 75:113

Personal Rapid Transit

Public Acceptance of New Mass Transit System, Roger B. Trent and Cooper N. Redwine, UP1:Aug 76:225:12361

Personnel

Cost Effectiveness Maintenance-Management Systems, Gary N. Shofner, TE2:May 76:331:12133
Engineering Services for Construction, Altaf Hussain, CO3:Sept 74:273:10787
Management Processes and Their Affect on Productivity, Chris F. Woods, PROD:Aug 76:113
Motivation of Construction Workers, Craig S. Hazeltine, CO3:Sept 76:497:12376

Personnel Management
Job Dissatisfactions in Construction Work, John D. Borcherding and Clarkson H. Oglesby, CO2:May 75:415:11390
Management Careers for Engineers, Harold G. Evans, EI4:Oct 76:409:12497

Pert
Developments in CPM, PERT, and Network Analysis, Calin Popescu and John D. Borcherding, CO4:Dec 75:769:11763

Perturbation
Instability Mechanisms for Rotating Appendages, John O. Dow and Chuan C. Feng, Preprint No.2801, Sept 76, 27pp.

Perturbation Theory
Numerical-Perturbation Methods in Numerical Mechanics, Ali Hasan Nayfeh, NMG:June 76:I-168
Parametric Instabilities of Cable Hanging from Ship, William C. Kerr, OE75:June 75:569
Radial Dispersion in Ground-Water Flow, Bruce W. Hunt, EM6:Dec 74:1117:10998

Pesticides
Concepts in the Control of Nonpoint Water Pollution, M. H. Frere, David A. Woolhiser, J. H. Caro, B. A. Stewart and W. H. Wischmeier, Preprint No.2667, Apr 76, 24pp.

Petroleum Geology
Exxon's 850-ft Platform for Santa Barbara Channel, William J. Ruez, OE75:June 75:801

Petroleum Industry
Numerical Treatment of Some Geomechanical Problem Areas in Oil and Natural Gas Production, Jan Geertsma, NMG:June 76:II-759

Petroleum Refining
Impact of the Public on Proposed Offshore Oil Terminal and Refinery, John P. King, EFEEC:Aug 75:276

Ph
Impact of Dredging on Water Quality in Grays Harbor, Washington, John M. Smith, James B. Phipps, Eugene B. Schermer and Don F. Samuelson, DIEE:Jan 76:512
Industrial, Municipal Wastes Combined, Robert E. Hickman and Charles N. Smith, CE:Dec 76:68
Nitrifying Organism Concentration and Activity, Embar G. Srinath, Raymond C. Loehr and Tata B.S. Prakasam, EE2:Apr 76:449:12041
Nutrient Transformations in Mass Cultures of Marine Algae , Joel C. Goldman and John H. Ryther, EE3: June 75:351:11358
Physicochemical Parameters that Regulate Mobilization and Immobilization of Toxic Heavy Metals, Robert P. Gambrell, Rashid A. Khalid and W. H. Patrick, Jr., DIEE:Jan 76:4[illegible]8

Ph Control
Industrial, Municipal Wastes Combined, Robert E. Hickman and Charles N. Smith, CE:Dec 76:68

Phenols
Effect of Catalyst in Soil-Resin Stabilization, Dalim K. Majumdar, GT6:June 75:531:11385

Philippine Islands
Mathematical Model of the Bicol River System (Luzon, Philippines), Armando Ballofet and Virgilio A. Sahagun, WW76:Aug 76:170

Philippines
Effects of Overbank Flow in Flood Computations, Tawatchai Tingsanchali and Norbert L. Ackermann, HY7:July 76:1013:12266

Philosophy
More on "The Existential Pleasures of Engineering," by Samuel C. Florman (Book Review), W. E. Howland, CE:Sept 76:38
A Structural Design Process, James M. Becker, ST76: Aug 76:341
"The Existential Pleasures of Engineering," by Samuel C. Florman (Book Review), Dan H. Pletta, CE:Apr 76:106

Phosphorus
Fate of Wastewater Phosphorus in Soil, Carl G. Enfield and Bert E. Bledsoe, IR3:Sept 75:145:11593
Nonpoint Source Pollution from Agricultural Runoff, Douglas A. Haith and John V. Dougherty, EE5:Oct 76:1055:12481
Phosphate Release and Sorption by Lake Mohegan Sediments, John Fillos and Hiranmay Biswas, EE2: Apr 76:239:12029
Phosphorus Model of Muskegon Wastewater System, Carl G. Enfield and Lowell E. Leach, EE6:Dec 75: 911:11775

Phosphorus Compounds
Phosphorus Uptake by Biological Slimes, Alphonse E. Zanoni, EE6:Dec 76:1229:12621
Statistical Study of Phosphorus Removal in Wisconsin, Martin H. David, Frederick J. Schroeder, J. Jeffrey Peirce, Erhard F. Joeres and Daryl A. Braasch, EE2:Apr 76:433:12045

Photochemical Oxidizers
Dye Catalyzed Oxidation of Industrial Wastes, Jerome W. Sargent and Robert L. Sanks, EE5:Oct 76:879:12453

Photoelastic Analysis
Nonlinear Characterization and Analysis of Sand, Hon-Yim Ko and Raymond M. Masson, NMG: June 76:I-294

Photoelasticity
Applications of Photoelasticity to Structural Analysis, J. F. Jullien, R. Duhau and J. C. Cubaud, EM5:Oct 76:867:12486
Photoelastic Analysis of a Cofferdam, Naveed K. Burki and Rowland Richards, Jr., GT2:Feb 75:129: 11135
Shear Stresses in Beams with Discontinuity in Depth, John Marshall and Ravindra P. Jategaonkar, ST7: July 75:1393:11424
Stresses in Concrete Around Spiral Case, Prem S. Nigam, Om P. Jain and Madhu B. Kanchi, PO1:Jan 76:95:11845

Photoelastic Studies
Photoelastic Model of Bridge Cross-Frame Junction, Alex S. Redner and Leonard Pompa, EM4:Aug 76: 659:12347
Stresses in Shallow Elliptical Tunnel, Robert Mark, TN: GT11:Nov 76:1187:12513

Photogrammetric Surveys
New Adjustment of North American Datum and Surveyor, John D. Bossler, William E. Stephens, James R. Plasker, Wesley V. Hull and Douglas R. Lee, SU1:Oct 75:115:11657

Photogrammetry
Automation in Surveying and Mapping: Present and Future, Morris M. Thompson, Preprint No.2760, Sept 76, 17pp.
The Brock and Weymouth Photogrammetric Mapping Equipment, Alfred O. Quinn, Preprint No.2789, Sept 76, 10pp.
Control Densification by Analytic Photogrammetry, Wesley V. Hull, SU1:Oct 75:11:11624
Corner Restoration in Missouri, Norman L. Brown, SU1:Oct 75:101:11658
Engineering Surveying: Chapters 2, 5, 6, 8, 16, and 20, George M. Mayfield, Chmn., SU1:Dec 76:59: 12648
Image Error and Photogrammetric Requirements, G. Warren Marks, SU1:Dec 76:39:12607

Measuring Watershed Land-Use Changes with Airphotos, Donald B. Stafford, James T. Ligon and M. Eugene Nettles, TE1:Feb 76:117:11925
Nebraska Flood-Plain Management Program—Part II, James R. Cook, HY7:July 75:983:11438
New Procedure for Numerical Relative Orientation, Santosh K. Mahajan, SU2:Nov 74:155:10962
Photographic Remote Sensing of Bolinas Lagoon, California, Douglas M. Pirie and Michael J. Murphy, Preprint No.2647, Apr 76, 17pp.
Recycling Older Buildings Preserves History, Saves Money, Harold H. Franke, CE:Oct 75:55
Refined Stress Analysis of Human Aortic Heart Valves, Altay Cataloglu, Phillip L. Gould and Richard E. Clark, EM1:Feb 76:135:11924
Use of Remote Sensing for Mapping Wetlands, Robert J. Reimold and Rick A. Linthurst, TE2:May 75:189:11293

Photographic Images
Remote Sensing of Mississippi River Characteristics, James F. Ruff, Morris M. Skinner, Brien R. Winkley, Daryl B. Simons and Dennis E. Dorratcague, WW2:May 76:189:12150

Photographic Processing Equipment
The Brock and Weymouth Photogrammetric Mapping Equipment, Alfred O. Quinn, Preprint No.2789, Sept 76, 10pp.

Photointerpretation
Classification and Analysis of River Processes, Rolf Kellerhals, Michael Church and Dale I. Bray, HY7: July 76:813:12232

Photolysis
Dye Catalyzed Oxidation of Industrial Wastes, Jerome W. Sargent and Robert L. Sanks, EE5:Oct 76:879:12453

Photovoltaic Cells
New Sources of Power—Solar Energy, Peter E. Glaser, EI4:Oct 75:461:11661

Phreatic Lines
Performance of a Cellular Sheetpile Wharf, Warren L. Schroeder, Dennis K. Marker and Thanasarn Khuayjarernpanishk, Preprint No.2731, Apr 76, 28pp.
Studies on Seepage from Canals with Partial Lining, Kanakatti Subramanya, Madhira Radha Madhav and Govinda Chandra Mishra, HY12:Dec 73:2333: 10197

Physicochemical Properties
Physicochemical Parameters that Regulate Mobilization and Immobilization of Toxic Heavy Metals, Robert P. Gambrell, Rashid A. Khalid and W. H. Patrick, Jr., DIEE:Jan 76:418

Phytoplankton
Challenge of Michaelis-Menton Constants, Brian W. Mar, TN: EE5:Oct 76:1114:12442

Piers
Large-Scale Model Test of Drilled Pier in Sand, Samuel P. Clemence and William F. Brumund, GT6:June 75:537:11369
Lateral Loading of Deep Foundations in Stiff Clay, Lymon C. Reese and Robert C. Welch, GT7:July 75:633:11456

Piezometers
Earth Pressures Measured with Hydraulic Piezometers, A. D.M. Penman, GT75:June 75:II-361
Instrumentation for Wave Induced Pore Pressures, James T. Dette, Vahan Tanal and Joseph A. Fischer, OE75:June 75:355
Mica Dam Embankment Stress Analysis, Nigel A. Skermer, GT3:Mar 75:229:11162

Pile Bearing Capacities
Bearing Capacity and Settlement of Pile Foundations, George Geoffrey Meyerhof, GT3:Mar 76:195:11962
H-Bearing Piles in Limestone and Clay Shales, William D. Ashton and Paul H. Schwartz, GT7: July 74:787:10667

Pile Driving
Deep Sea Construction, S. Samuel Doughty, CO3: Sept 75:607:11575
Design of Piles for Deep Water Offshore Structures, P. George and Ian M. Smith, NMG:June 76:I-419
Dynamic Behavior of Partially Embedded Pile, Muhammed A. Satter, GT7:July 76:775:12265
Failure of Anchored Sheet Pile Walls, Bengt B. Broms and Hakan Stille, GT3:Mar 76:235:12000
H-Bearing Piles in Limestone and Clay Shales, William D. Ashton and Paul H. Schwartz, GT7: July 74:787:10667
The Superdome Foundation, Thor L. Anderson and Melvin C. Williams, CO1:Mar 76:81:11971

Pile Extraction
H-Bearing Piles in Limestone and Clay Shales, William D. Ashton and Paul H. Schwartz, GT7: July 74:787:10667

Pile Foundations
Analysis of Creep Settlement of Pile Foundations, John R. Booker and Harry G. Poulos, GT1:Jan 76: 1:11826
Design of Piles for Deep Water Offshore Structures, P. George and Ian M. Smith, NMG:June 76:I-419
Dynamic Stiffness of Piles, G. W. Blaney, Eduardo Kausel and Jose M. Roesset, NMG:June 76:II-1001
Finite Element Analysis of Pile-Supported Pavement Structures, Raman Pichumani, John E. Crawford and George E. Triandafilidis, TE2:May 74:293: 10516
Full-Scale Lateral Load Tests of Pile Groups, Jai B. Kim and Robert J. Brungraber, GT1:Jan 76:87: 11849
H-Bearing Piles in Limestone and Clay Shales, William D. Ashton and Paul H. Schwartz, GT7: July 74:787:10667
New Orleans Grows on Deep Piles, Roney A. Heinz, CE:Apr 76:73
Portable Pier System Developed by Navy, CE:Mar 76:14
Protection of Piles: Steel, Concrete, Wood, Roney A. Heinz, CE:Dec 75:59
Safety Factor Evaluation for Single Piles in Sand, James Neil Kay, GT10:Oct 76:1093:12494
Settlement of Building on Pile Foundation in Sand, Robert M. Koerner and Antal Partos, GT3:Mar 74: 265:10405

Pile Groups
Lateral Load-Deflection Prediction for Pile Groups, Harry G. Poulos, GT1:Jan 75:19:11061
Three-Dimensional Analysis of Vertical Pile Groups, Prasanta K. Banerjee and Richard M. Driscoll, NMG:June 76:I-438

Pile Loading Tests
H-Bearing Piles in Limestone and Clay Shales, William D. Ashton and Paul H. Schwartz, GT7: July 74:787:10667
Torsional Response of Piles, Harry G. Poulos, GT10: Oct 75:1019:11629

Piles
Accuracy of Numerical Solutions for Laterally Loaded Piles in Elastic Half-Space, Aldo Evangelista and Carlo Viggiani, NMG:June 76:III-1367
Analysis and Design of Laterally Loaded Piles and Caissons in a Layered Soil System, Tarun R. Naik and Alain H. Peyrot, ST76:Aug 76:589
Cross-Flow Response of Piles Due to Ocean Waves, Rimas Vaicaitis, EM1:Feb 76:121:11897
Design of Piles for Deep Water Offshore Structures, P. George and Ian M. Smith, NMG:June 76:I-419

Drag and Inertia Coefficients in Oscillatory Flow About Cylinders, C. J. Garrison, Preprint No.2693, Apr 76, 24pp.
Dynamic Behavior of Partially Embedded Pile, Muhammed A. Satter, GT7:July 76:775:12265
Dynamic Stiffness of Piles, G. W. Blaney, Eduardo Kausel and Jose M. Roesset, NMG:June 76:II-1001
The Equivalent Length of a Pile or Caisson in Soil, Peter Kocsis, CE:Dec 76:63
Finite Element Analysis of Piles in Viscoelastic Soil, John R. Booker and Harry G. Poulos, NMG:June 76:I-425
Hydrodynamic Forces and Moments for Oscillating Cylinders, Yong Kwun Chung and Martha I. Coleman, OE75:June 75:899
Interaction of Plane Waves with a Row of Cylinders, Bradford W. Spring and Peter L. Monkmeyer, OE75:June 75:979
Lateral Load-Deflection Prediction for Pile Groups, Harry G. Poulos, GT1:Jan 75:19:11061
Laterally Loaded Pipe Pile in Cohesionless Soil, Helmut E. Meissner, NMG:June 76:III-1353
New Orleans Grows on Deep Piles, Roney A. Heinz, CE:Apr 76:73
Nonlinear Flow of Wave Crests Past a Thin Pile, Robert J. Hallermeier, WW4:Nov 76:365:12551
Protection of Piles: Steel, Concrete, Wood, Roney A. Heinz, CE:Dec 75:59
Some Aspects of Theory and Applications of Numerical Methods, Chandrakant S. Desai, NMG: June 76:I-58
Stresses in Soils due to Vertical Load on Piles, Verendra Singh, NMG:June 76:I-451
Test Loading of Piles and New Proof Testing Procedure, Bengt H. Fellenius, GT9:Sept 75:855: 11551
Uplift Capacity of Group Piles in Sand, Braja M. Das, Gerald R. Seeley and Jonathan E. Smith, TN: GT3:Mar 76:282:11953
Uplift Capacity of Model Piles Under Oblique Loads, Braja M. Das, Gerald R. Seeley and Dorairaja Raghu, TN: GT9:Sept 76:1009:12367
Uplift Resistance of Piles in Sand, Ibrahim H. Sulaiman and Harry M. Coyle, TN: GT5:May 76: 559:12127
Wave Forces on Vertical Circular Cylinder, Subrata K. Chakrabarti, Allan L. Wolbert and William A. Tam, WW2:May 76:203:12140
Waves and Wave Forces in the Presence of Currents, Robert A. Dalrymple, OE75:June 75:999
3-D Analysis of Laterally Loaded Structures, Chandrakant S. Desai and G. C. Appel, Jr., NMG: June 76:I-405

Piles (Foundations)

Behavior of Bored Piles in Sand, Fadlo T. Touma and Lymon C. Reese, GT7:July 74:749:10651
Caisson Evaluation by Stress Wave Propagation Method, Joav Steinbach and Eben Vey, GT4:Apr 75:361:11245
H-Bearing Piles in Limestone and Clay Shales, William D. Ashton and Paul H. Schwartz, GT7: July 74:787:10667
Massive Compaction of Granular Soil — How We Stand, Henry W. Janes and Robert D. Anderson, Preprint No.2777, Sept 76, 28pp.
Numerical Design-Analysis for Piles in Sands, Chandrakant S. Desai, GT6:June 74:613:10617
Present and Future Trends in Foundations, Robert E. White, Preprint No.2795, Sept 76, 17pp.
Torsional Response of Piles, Harry G. Poulos, GT10: Oct 75:1019:11629

Pile Structures

Transverse Forces on Vertical Cylinders in Waves, Michael de St. Q. Isaacson and David J. Maull, WW1:Feb 76:49:11934

Pilot Plants

Pilot Plant Program — Treatment of NYC Water Supply, George P. Fulton and Edward A. Bryant, CE:June 76:52

Pilots

The Constructed Environment with Man as the Measure as Part of the Quality System in Construction, Cabell Gwathmey, Chmn., EFAN: Nov 74
Pilots Evaluation of the D/FW Airport, Woody Lockhart, EFAN:Dec 74:201
Summary for Session IV —Case Study of Dallas/Fort Worth Airport, Jack L. Mahan, Jr., EFAN:Dec 74: 265

Pin Connected Joints

Least-Weight Frameworks for Loads Across Span, Richard E. McConnel, EM5:Oct 74:885:10872

Pipe Design

Design of Alternating Diffuser Pipes, Aleksandar Nospal and Jean-Claude Tatinclaux, TN: HY4:Apr 76:553:12018
Non-Breaking and Breaking Wave Forces on Pipelines, Robert A. Grace and Joseph Castiel, OE75:June 75:523
Rigid Plastic Beam Model for Pipe Whip Analysis, Martin A. Salmon and Vijay K. Verma, EM3:June 76:415:12206
Risk-Safety Factor Relation for Storm Sewer Design, Ben Chie Yen and Wilson H. Tang, TN: EE2:Apr 76:509:12016
Sewer Line Design Based on Critical Shear Stress, Kuan M. Yao, EE2:Apr 74:507:10480

Pipe Flow

Accurate Explicit Equation for Friction Factor, Akalank K. Jain, TN: HY5:May 76:674:12129
Air-Entrainment in High Head Gated Conduits, Hari R. Sharma, HY11:Nov 76:1629:12523
Comparison of Single-Point Injections in Pipe Flow, Ahmed M. Ger and Edward R. Holley, HY6:June 76:731:12172
Explicit Equations for Pipe-Flow Problems, Prabhata K. Swamee and Akalank K. Jain, HY5:May 76:657: 12146
Explicit Working for Turbulent Pipe Flow Problems, David I.H. Barr, TN: HY5:May 76:667:12129
Flow in Corrugated Pipes, Robert J. Shipton and Harald R. Graze, HY9:Sept 76:1343:12414
Gas Release During Transient Cavitation in Pipes, C. Kranenburg, HY10:Oct 74:1383:10892
Giuseppe Venturoli, Pioneer in Channel Studies, Rene Chevray, HY10:Oct 76:1533:12488
Least Cost Design of Branched Pipe Network System, Arun K. Deb, EE4:Aug 74:821:10711
Menabrea's Note on Waterhammer: 1858, Alexander Anderson, HY1:Jan 76:29:11831
Meter for Sewer Flow Measurement, Harry G. Wenzel, Jr., HY1:Jan 75:115:11070
Resonance Phenomena Due to Turbulent Boundary Layer Excitation of Elastic Surfaces, Robert L. Ash and R. Balasubramanian, Preprint No.2726, Apr 76, 28pp.
Skin Friction in Unsteady Laminar Pipe Flow, Mario F. Letelier S. and Hans J. Leutheusser, HY1:Jan 76:41:11867
Sparsity Oriented Analysis of Large Pipe Networks, M. Chandrashekar and K. H. Stewart, HY4:Apr 75: 341:11260
Transformation of Moody Diagram, Krishna C. Asthana, HY6:June 74:797:10624
Water Hammer in Coaxial Pipe Systems, Werner Burmann, HY6:June 75:699:11374
Water Hammer in PVC and Reinforced Plastic Pipe, Gary Z. Watters, Roland W. Jeppson and Gordon H. Flammer, HY7:July 76:831:12236

Pipe Joints

Laboratory Study of Energy Losses at Storm Sewer Junctions, Jan R. Prins and David R. Townsend, IR76:July 76:609

Pipe Laying

Assessment of Environmental Impact on the Aquatic Environment with Limited Field Data, Paul E. Flatt and Charles D.D. Howard, IR76:July 76:435

Depth of Marine Pipeline Burial Near Shore, Melville S. Priest and Keith H. Denson, Preprint No.2636, Apr 76, 6pp.

Pipeline Bridges
Fifty-Year Development — Construction of Steel Pipeline Suspension Bridges, John F. Cain, CO4: Dec 75:733:11768

Pipelines
Choice and Application of Computer Programs in Pipe Whip Analysis, Vera F. Dunder and Klaus-Jurgen Bathe, STN75:Dec 75:II-379
Computer Simulation of Water Distribution Networks, Claude R. Gagnon and Samuel L.S. Jacoby, TE3:Aug 75:553:11515
Depth of Marine Pipeline Burial Near Shore, Melville S. Priest and Keith H. Denson, Preprint No.2636, Apr 76, 6pp.
Design of Conduit System with Diverging Branches, Kwang-Ping Yang, Tung Liang and I-Pai Wu, HY1: Jan 75:167:11080
Five Decades of Progress in Pipelining, David R. Williams, Jr., CO4:Dec 75:751:11770
Gas Release During Transient Cavitation in Pipes, C. Kranenburg, HY10:Oct 74:1383:10892
Geotechnical Aspects of Trans-Alaska Pipeline, Ulrich Luscher, William T. Black and Keshavan Nair, TE4:Nov 75:669:11722
Geotechnical Input for Deep-Water Pipelines, Bing C. Yen, R. Leonard Allen and Harry H. Shatto, OE75:June 75:504
A History of Bureau of Reclamation Construction-Part II, Harold G. Arthur, CO1:Mar 75:69:11190
Liquefaction Criteria for the Trans-Alaska Pipeline, Neville C. Donovan and Sukhmander Singh, Preprint No.2752, Sept 76, 30pp.
Major Junction Structure Verified by Modeling, Charles H. Lawrance and Munson W. Dowd, HY4: Apr 76:499:12066
Meeting the Challenge of Constructing a Reservoir Bypass Pipeline, Duane D. Buchholz and Roger T. Menlove, Preprint No.2644, Apr 76, 19pp.
Non-Breaking and Breaking Wave Forces on Pipelines, Robert A. Grace and Joseph Castiel, OE75:June 75:523
Optimum Size of Equipment, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:861:11772
Oxnard-Hueneme Pipeline, Operation and Water Quality Problems, Richard A. Smith, Preprint No.2683, Apr 76, 8pp.
Pipeline Corridor Selection Model Concept, Francis J. Stastny, TE2:May 75:337:11330
Pipeline Stress Analysis, Jamal J. Azar, John G. Bomba and Verle G. Randolph, TE1:Feb 75:163: 11122
Seismic Analysis of Underground Structural Elements, Hemant H. Shah and Shih-Lung Chu, PO1:July 74:53:10648
Seismic Response of Pipelines on Friction Supports, James C. Anderson and Anand K. Singh, EM2:Apr 76:275:12043
Utility Land Corridors Location Model — Environmental Assessment, Thomas E. Wester and Dennis W. Weeter, Preprint No.2653, Apr 76, 29pp.
Wave Forces on Cylinders Near Plane Boundary, Tokuo Yamamoto, John H. Nath and Larry S. Slotta, WW4:Nov 74:345:10944

Pipeline Transportation
Computer Simulation of Water Distribution Networks, Claude R. Gagnon and Samuel L.S. Jacoby, TE3:Aug 75:553:11515
Five Decades of Progress in Pipelining, David R. Williams, Jr., CO4:Dec 75:751:11770
Geotechnical Input for Deep-Water Pipelines, Bing C. Yen, R. Leonard Allen and Harry H. Shatto, OE75:June 75:504
Pipeline Corridor Selection Model Concept, Francis J. Stastny, TE2:May 75:337:11330
Pipeline Stress Analysis, Jamal J. Azar, John G. Bomba and Verle G. Randolph, TE1:Feb 75:163: 11122
Stability of Offshore Pipe in Cohesive Sediment, Osman I. Ghazzaly, Leland M. Kraft, Jr. and S. J. Lim, OE75:June 75:490

Pipes
Analysis of Buried Pipe Under Embankment, Shamsher Prakash, Gyan C. Nayak and R. Gupta, NMG:June 76:II-886
Benjamin Latrobe: Helping Cleanse America, CE:July 76:80
Gabions, Perforated Pipe and Gravel Serve as Fish Screens, Reuben E. Schmidt and Kenneth R. McSwain, CE:May 76:73
Stresses in GRP Cylinders with Radial Line Load, Fred C. McCormick and Richard T. Hunt, EM4: Aug 75:417:11520
Stresses on Shallow Circular Pipe by Transformed Section, Rowland Richards, Jr. and Jagdish S. Agrawal, GT6:June 74:637:10631
Synthesis of Finite Element Analysis of Culverts, John F. Abel and James Neil Kay, NMG:June 76: II-873
Test of Circular Steel Tubes in Bending, Donald R. Sherman, ST11:Nov 76:2181:12568

Piping (Erosion)
Fundamentals of Piping, Richard F. Flanagan, Preprint No.2766, Sept 76, 18pp.
Pinhole Test for Identifying Dispersive Soils, James L. Sherard, Lorn P. Dunnigan, Rey S. Decker and Edgar F. Steele, GT1:Jan 76:69:11846

Piping Systems
Survey of Nozzle Piping Reaction Criteria for Mechanical Equipment, Richard A. Meyer, STN75: Dec 75:II-283

Pitting
Predicting Cavitation in Sudden Enlargements, James W. Ball, J. Paul Tullis and Travis Stripling, HY7: July 75:857:11442

Plane Structures
Analysis of Lateral Buckling in Plane Frames, Porpan Vacharajittiphan and Nicholas S. Trahair, ST7:July 75:1497:11430
Weight Optimization of Plane Trusses, Samuel L. Lipson and Krishna M. Agrawal, ST5:May 74:865: 10521

Planing
Conceptual RMC/Time Synthesis, Marvin Gates and Amerigo Scarpa, CO2:June 76:307:12181

Planning
Analysis and Management of Water Distribution Systems, Hubert Demard, Bernard Bobee and Jean-Pierre Villeneuve, UP2:Nov 75:167:11679
Analysis of Urban Transportation Criteria, Thabet Zakaria, TE3:Aug 75:521:11496
Career Growth for the Professional Engineer, Lindon E. Saline, CE:Nov 75:56
Changes in Socioeconomic Considerations, Walter E. Lewis, UP1:Aug 76:29:12355
Changes in the Private Sector, David Stahl, UP1:Aug 76:25:12352
Community Role in Modal Choice for Transit System Planning, Robert E. Paaswell and Janice Pafka-Gerbig, UP1:May 75:35:11305
Cost Effectiveness Maintenance-Management Systems, Gary N. Shofner, TE2:May 76:331:12133
Developments in CPM, PERT, and Network Analysis, Calin Popescu and John D. Borcherding, CO4:Dec 75:769:11763
Economic and Social Issues of Our Cities, Phillip Hammer, UP1:Aug 76:69:12354
Economic Measure of Benefits of Transportation, John F. Brotchie, TE1:Feb 76:17:11888
Evaluating Economic and Energy Consequences of Land-Use Decisions, Robert S. DeVoy, UP1:Aug 76:105:12331
Future of Highways, Fiscal Constraints, Srikanth Rao, Thomas D. Larson and Theodore H. Poister, Preprint No.2768, Sept 76, 24pp.

Highlights of San Diego Convention, CE:June 76:67
Identifying the Publics in Water Resource Planning, Gene E. Willeke, WR1:Apr 76:137:12064
Improving Downtown Circulation and Environment — Bring Back the Trolley Bus?, Walter Kudlick, Preprint No.2810, Sept 76, 12pp.
Incorporating Highway Safety into Level of Service, Walter J. Diewald, TE2:May 74:417:10557
Integrated Evaluation from a Regional Perspective, Jane Rodgers and George V. Wickstrom, UP1:Aug 76:125:12338
Integrated Evaluation Programs for Fairfax County, Va., Jim Reid, UP1:Aug 76:137:12332
Integrating Evaluation at the Project Scale, Alan M. Voorhees, UP1:Aug 76:35:12351
Intergovernmental Guidance of Land Use and Growth, Bruce D. McDowell, UP1:Aug 76:15:12319
An Issue-Based Land-Use Planning Process, Stephen C. Lockwood, UP1:Aug 76:41:12341
Local Land Use Workshops Help, Murray I. Mantell, CE:Oct 75:88
Method for Designing Airport Terminal Concepts, John P. Braaksma and John H. Shortreed, TE2:May 75:321:11308
Methodology of Construction Industry Profiling: A Case History, Mark H. Jordan, EI1:Jan 76:67:11864
Nation's Capital Faces Critical Water Problems, CE:June 75:58
New Approach to Site Selection Studies, W. Ray Seiple, PO1:July 74:63:10643
Optimum Size of Hauling Units, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:853:11771
Planning Air Transport Network in Appalachia, Everett C. Carter and Edward K. Morlok, TE3:Aug 75:569:11499
Planning for Water Quality: 1776 to 1976, Donald L. Hey and W. Henry Waggy, Preprint No.2754, Sept 76, 16pp.
Planning the Tehachapi Crossing, Alfred R. Golze, HY1:Jan 75:1:11052
Staff Versus Administration Versus Board or the Planning Process Organized for Consensus Instead of Conflict, James Falick, David Burdick and Henry Winkelman, Preprint No.2701, Apr 76, 23pp.
Theory and Practice of Public Participation in Planning, Gene E. Willeke, IR1:Mar 74:75:10391
Use of Simulation in Airport Planning and Design, Dana E. Low, TE4:Nov 74:985:10954
Water Quality Planning Strategy, George R. Grantham and Thomas E. Bailey, WR1:Apr 76:11:12060
2020 Hindsight; Another Fifty Years of Irrigation?, Daniel A. Dreyfus, IR2:June 75:87:11363

Plant Efficiencies

Theory of Storage and Treatment-Plant Overflows, Charles D.D. Howard, EE4:Aug 76:709:12310

Plant Growth

Vegetative Management of Water Hyacinths, Edward O. Gangstad, WW76:Aug 76:672

Planting

Transplanting Maritime Plants to Dredged Material in Mississippi Waters, Lionel H. Eleuterius and Hugh A. McClellan, DIEE:Jan 76:900

Plants (Botany)

Environmental Aspects of Aquatic Plant Control, Thomas R. Bartley and Edward O. Gangstad, IR3:Sept 74:231:10810
Soil-Plant Relationships in Dredged Material Marshes with Particular Reference to Heavy Metal and Nutrient Availability, J. S. Boyce, DIEE:Jan 76:496
Transplanting Maritime Plants to Dredged Material in Mississippi Waters, Lionel H. Eleuterius and Hugh A. McClellan, DIEE:Jan 76:900
Wind Control of Algae Growth in Eutrophic Lakes, Heinz Stefan, Timothy Skoglund and Robert O. Megard, EE6:Dec 76:1201:12619

Plastic Analysis

Thermoelastic/Plastic Analysis in Rock Mechanics, William G. Pariseau, NMG:June 76:II-1168

Plastic Design

Commentary on Safety Factors in Plastic Design, Burl R. Richardson, TN: CO4:Dec 76:683:12590
Multistory Frame Design Using Story Stiffness Concept, Francois Cheong Siat Moy, ST6:June 76:1197:12221
Optimal Design of Multiload Multispan Systems, George I.N. Rozvany, TN: EM6:Dec 76:1085:12591
Plastic Design of Web Openings in Steel Beams, Marvin A. Larson and Kirit N. Shah, ST5:May 76:1031:12155

Plasticity

Analysis of Pressuremeter in Strain-Softening Soil, Jean-Herve Prevost and Kaare Hoeg, GT8:Aug 75:717:11488
Constitutive Relations for Concrete, Andrie C.T. Chen and Wai F. Chen, EM4:Aug 75:465:11529
Design Criteria for H-Columns under Biaxial Loading, Negussie Tebedge and Wai F. Chen, ST3:Mar 74:579:10400
Effective Stress-Strain-Strength Model for Soils, Jean-Herve Prevost and Kaare Hoeg, GT3:Mar 75:259:11157
Elastoplastic Torsion of Anisotropic Bars, Pravit Boonlualohr and Somasundaram Valliappan, EM6:Dec 76:995:12634
Energy Approach to Inelastic Cable-Structure Analysis, Giulio Maier and Roberto Contro, EM5:Oct 75:531:11614
Finite Element Analysis of Large Deformation in Slopes, Nimitchai Snitbhan and Wai F. Chen, NMG:June 76:II-744
Local Unloading in Piecewise-Linear Plasticity, Osvaldo De Donato and Giulio Maier, EM3:June 76:383:12170
Nonlinear Analyses in Soil and Solid Mechanics, Hugh L. Davidson and Wai F. Chen, NMG:June 76:I-205
Nonlinear Analysis of RC Shells of General Form, Cheng-Shung Lin and Alexander C. Scordelis, ST3:Mar 75:523:11164
Non-Linear Elastic Approximations of the Behaviour of Soils, Arnold Verruijt, NMG:June 76:III-1321
On the Distribution of Stress Around a Circular Tunnel Under Internal Pressure in Gravitating Plastic Ground with Frictional Resistance, Eiichi Oda and Takuo Yamagami, NMG:June 76:II-847
Physicochemical Properties of Dredge Spoil, Alena Mudroch and Ales J. Zeman, WW2:May 75:201:11317
Plasticity and Some of Its Corollaries in Soil Mechanics. Collapse and Continuing Deformation Under Load Repetition, Olgierd C. Zienkiewicz, NMG:June 76:III-1275
Plasticity Solutions for Slopes, Wai F. Chen and Nimitchai Snitbhan, NMG:June 76:II-731
Stress-Path Independent Behavior of Cohesionless Soil, Poul V. Lade and James M. Duncan, GT1:Jan 76:51:11841

Plastic Pipes

Polyethylene Pipe Solutions to Sewer Outfalls, Donald R. Wells, CE:Sept 76:62
Water Hammer in PVC and Reinforced Plastic Pipe, Gary Z. Watters, Roland W. Jeppson and Gordon H. Flammer, HY7:July 76:831:12236

Plastic Properties

Calculations to Test a Pack Ice Model, Max D. Coon, Roger Colony, Robert S. Pritchard and D. A. Rothrock, NMG:June 76:II-1210
Cracking Analysis of Reinforced Concrete Plates, Maharaj K Wanchoo and Gerald W. May, ST1:Jan 75:201:11059
A Difference Scheme for the AIDJEX Sea Ice Model, Robert S. Pritchard and Roger Colony, NMG:June 76:II-1194

Interpretation of Torsion Shear Tests on Sand, Poul V. Lade, NMG:June 76:I-381
Laterally Loaded Pipe Pile in Cohesionless Soil, Helmut E. Meissner, NMG:June 76:III-1353
Plastic Rotations in Continuous Encased Beams, Subhash Chandra Maiti, ST6:June 75:1269:11375
Viscoplastic Constitutive Matrix Corresponding to the Hyperbolic Sine Creep Law, Guenter W. Borm, NMG:June 76:I-357

Plastics
Experimental Bridge Girder of Reinforced Plastic, Fred C. McCormick, TE1:Feb 75:47:11104
Nuclear Turbine-Generator Foundation Model Tests, Ish K. Aneja and Brian W. Dimmick, Preprint No.2704, Apr 76, 30pp.
Plastic-Reinforced Asphalt Seepage Barrier, Ronald K. Frobel and C. Brent Cluff, IR3:Sept 76:369:12430

Plates
Buckling of Web Plates under Combined Loadings, Mohammed Z. Khan and Kenneth C. Johns, ST10:Oct 75:2079:11619
Modal Analysis for Impact of Layered Plates, James T. Kubo and Richard B. Nelson, EM1:Feb 75:45:11133
Nonconforming Finite Element Analysis of Shells, Chang-Koon Choi and William C. Schnobrich, EM4:Aug 75:447:11504
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, EM6:Dec 76:1041:12640
Rigid-Plastic Circular Plates on Elastic Foundation, Dusan Krajcinovic, EM2:Apr 76:213:12046

Plates (Structural Members)
Analysis of Multilayer Plates on Elastic Pillars, Ashok K. Chugh, Hans Gesund and Fred D. Wright, ST11:Nov 75:2405:11738
Beam Analog for Plate Elements, M. Ezzat Mohsin and Edward E. Sadek, ST1:Jan 76:125:11844
Bending of Skew Orthotropic Plate Structures, John B. Kennedy and Davalath S.R. Gupta, ST8:Aug 76:1559:12302
Buckling Strength of Multiple Stiffened Plates, Akio Hasegawa, Koji Oto and Fumio Nishino, ST76:Aug 76:937
Continuous Plate Analysis by Finite Panel Method, Richard M. Gutkowski and Chu-Kia Wang, ST3:Mar 76:629:12002
Cracking Analysis of Reinforced Concrete Plates, Maharaj K Wanchoo and Gerald W. May, ST1:Jan 75:201:11059
Discrete Field Stability Analysis of Ribbed Plates, R. Richard Avent and Dieter Bounin, ST9:Sept 76:1917:12413
Field Problems of Latticed Structures, Lev Zetlin, Joseph F. Thelen and Daniel A. Cuoco, ST11:Nov 75:2241:11711
Floating Plate under Wind Waves and Human Response, Masanobu Shinozuka, H. M. Hwang and E. Makitani, Preprint No.2650, Apr 76, 30pp.
Full Range Analysis of Eccentrically Stiffened Plates, Anton W. Wegmuller, ST1:Jan 74:143:10286
Inelastic Strength of Cold-Formed Steel Beams, H. Peter Reck, ST11:Nov 75:2193:11713
Local and Overall Buckling of Cold-Formed Members, John T. DeWolf, Teoman B. Pekoz and George Winter, ST10:Oct 74:2017:10875
Lumped Parameter Circular Plate Stability Analysis, George Johnson and Walter Pilkey, TN: ST5:May 76:1135:12128
Minimum Reinforcement of Nonuniform Plates, Robert E. Melchers, EM6:Dec 76:943:12618
Model of Interactive Buckling of Stiffened Plates, James G.A. Croll, EM5:Oct 75:575:11622
Nonlinear Analysis of Unsymmetrically Laminated Plates, Samir A. Zaghloul and John B. Kennedy, EM3:June 75:169:11345
A Numerical Method of Analysis of Foundation Plates, Alexander M. Gorlov, NMG:June 76:III-1371
Numerical Solution of Moderately Thick Plates, Rajabhau S. Deshmukh and Robert R. Archer, EM5:Oct 74:903:10860
Optimally Reinforced Axisymmetric Plates, Robert E. Melchers, EM2:Apr 75:143:11258
Parallel Flow Between Corrugated Plates, Chang-Yi Wang, TN: EM6:Dec 76:1088:12591
Parallel Motion of Corrugated Plates, Chang-Yi Wang, TN: EM2:Apr 76:373:12017
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, Preprint No.2687, Apr 76, 28pp.
Shear Buckling of Square Perforated Plates, John F. Grosskurth, Jr., Richard N. White and Richard H. Gallagher, EM6:Dec 76:1025:12641
Simplified N-Dimensional Interaction Surfaces, Thomas A. Duffey and Howard L. Schreyer, ST7:July 76:1291:12230
Stability of Generally Orthotropic Skew Plate, R. S. Srinivasan and S. V. Ramachandran, TN: EM3:June 76:569:12168
Strength of Slab-Column Connections with Shear and Unbalanced Flexure, Robert Park and Shafiqul Islam, ST9:Sept 76:1879:12419
Tests on Slab-Column Connections with Shear and Unbalanced Flexure, Shafiqul Islam and Robert Park, ST3:Mar 76:549:11972
Transverse Bending of Laminated Anisotropic Plates, Eric Reissner, TN: EM3:June 76:559:12168
Trapezoidally Corrugated Plates in Shear, M. Iqbal Hussain and Charles Libove, ST5:May 76:1109:12159
Variation of Tapered Plates by Finite Strip Method, Victor A. Pulmano and Radhey K. Gupta, TN: EM3:June 76:553:12168

Playgrounds
A Tool for Improving Social Service Delivery Systems in Urban Areas, Allen E. Shinder and Martin L. Reiss, BP75:Dec 75:366

Plume Detection
Dredge-Fill in the Coral Reef Tract of the Northern Florida Keys, George M. Griffin, DIEE:Jan 76:768

Plumes
Buoyant Forced-Plumes in Cross Flow, Vincent H. Chu and Michael B. Goldberg, HY9:Sept 74:1203:10805
Dredge-Fill in the Coral Reef Tract of the Northern Florida Keys, George M. Griffin, DIEE:Jan 76:768
Entrainment and Drag Forces of Deflected Jets, Daniel T.-L. Chan, Jung-Tai Lin and John F. Kennedy, HY5:May 76:615:12141
Gross Parameter Solutions of Jets and Plumes, Klas Cederwall, HY5:May 75:489:11285
A Study of the Effects of Maintenance Dredging on Selected Ecological Parameters in the Gulfport Ship Channel, Gulfport, Mississippi, Joseph W. Markey and Hugh D. Putnam, DIEE:Jan 76:821

Plywood
Bibliography on Wood and Plywood Diaphragms, J. M. Carney, ST11:Nov 75:2423:11737
Structural Characteristics of Weathered Plywood, Michael O. Hunt and DeForest A. Matteson, Jr., ST4:Apr 76:759:12050
Wood Shear Panels Bonded with Flexible Adhesives, John A. Richards, Robert P. Kerfoot and Gordon P. Krueger, ST1:Jan 75:131:11056

Polarization (Waves)
Method for Crosshole Seismic Testing, Robert F. Ballard, Jr., GT12:Dec 76:1261:12646

Poles
Analysis and Design of Laterally Loaded Piles and Caissons in a Layered Soil System, Tarun R. Naik and Alain H. Peyrot, ST76:Aug 76:589

Poles (Supports)
Design of Steel Transmission Pole Structures, Gene M. Wilhoite, Chmn., ST12:Dec 74:2449:11009

Policies
America's Energy Futures, Monte Canfield, Jr., EFEEC:Aug 75:6
Policy-Making and Acceptable Earthquake Risk, Robert A. Olson, EFRLD:Sept 75:141
A State Government View of Energy Complexes, James E. Harrington, EFEEC:Aug 75:59

Polishes
Passenger Evaluation of D/FW Airport, James E. Dunne, EFAN:Dec 74:207

Political Aspects
Ethics: Wisconsin Section Sparks Timely Discussion, Robert W. Brannan, CE:May 76:90
When Is A Political Contribution Influence Buying?, Thomas J. McCollough, EI1:Jan 76:1:11860

Political Parties
Political Involvement of Civil Engineers, Allen W. Hatheway, EI1:Jan 76:11:11866
When Is A Political Contribution Influence Buying?, Thomas J. McCollough, EI1:Jan 76:1:11860

Political Science
Social Science Emphasis in Engineering Education, Dan H. Pletta, EI4:Oct 75:509:11664

Pollutants
Flow of Pollutants through a Lock, Edwin P. Russo, TN: WW2:May 76:267:12096

Pollution
The Changing Scene, Harold E. Nelson, UP1:Aug 76: 3:12307
Energy and Pollution Concerns in Dredging, Adolph W. Mohr, WW4:Nov 75:405:11733
Fifty-Year Development of Naval Facilities Construction, Michael Yachnis, CO1:Mar 75:15: 11175
Ground-Water's Role in Water Quality Management, John O. Osgood, HY3:Mar 75:517:11159
Ocean Disposal of Waste Workshop, Donald J. Baumgartner and Robert B. Biggs, OE75:June 75: 1357
Optimal Control of Nitrogen Losses from Land Disposal Areas, Douglas A. Haith, EE6:Dec 73: 923:10?00
Pollution Prediction Model of Long Island Sound, Malcolm J. Bowman, OE75:June 75:1084
Radial Dispersion in Ground-Water Flow, Bruce W. Hunt, EM6:Dec 74:1117:10998
Recent Legislation Impacting on Dredging Projects, William L. Black, Preprint No.2727, Apr 76, 23pp.
Removal of Heavy Metals from Industrial Effluents, Jim V. Rouse, EE5:Oct 76:929:12447
Stabilization of Polluted Dredgings by Electro-Osmosis, Raymond J. Krizek, Francis B. Gularte and Paul L. Hummel, Preprint No.2641, Apr 76, 30pp.
Status of NOAA's Ocean Dumping Research in the New York Bight, R. Lawrence Swanson, Preprint No.2690, Apr 76, 30pp.
Vertical Temperature Profiles in Open-Channel Flow, Eric J. Schiller and William W. Sayre, HY6:June 75:749:11389
Water Quality Management and Information Systems, William D. Haseman, Arthur Z. Lieberman and Andrew B. Whinston, HY3:Mar 75: 477:11185

Pollution Abatement
Mechanical Dredges, Adolph W. Mohr, DIEE:Jan 76:125
Modern Trends in Dredge Design, Thomas M. Turner, DIEE:Jan 76:173

Pollution Control
Coupled Optimization-Simulation Water Quality Model, A. Bruce Bishop and William J. Grenney, EE5:Oct 76:1071:12452
Engineer's Role in Environmental Issues, James L. Van Beveren, EI2:Apr 76:169:12085
PL 92-500 to Cost Metal Finishing Industry $45 Billion, Eugene E. Dallaire, CE:Sept 76:84
Salinity Control and Federal Water Quality Act, Michael B. Bessler and John T. Maletic, HY5:May 75:581:11321

Polycarbonates
Ice Removal From the Walls of Navigation Locks, Guenther E. Frankenstein, James L. Wuebben, H. H.G. Jellinek and R. Yokota, WW76:Aug 76:1487

Polyelectrolytes
Laboratory Evaluation of Polymeric Flocculants, Andrew Benedek and John J. Bancsi, EE1:Feb 76: 17:11887

Polygons
Effective Column Length in Polygon Shaped Frames, Kuang-Han Chu and Robert H. Rampetsreiter, TN: ST8:Aug 76:1629:12288
Elastic Stability of Polygon Folded Plate Columns, R. Richard Avent and James H. Robinson, Jr., ST5: May 76:1015:12108

Polymer Concretes
Concrete in Water Resource and Energy Development, Harold G. Arthur, Preprint No.2741, Sept 76, 30pp.
Enclosed Soak System for Deep Polymer Impregnation of Concrete Bridge Decks, Paul R. Blankenhorn, Richard E. Weyers, Donald E. Kline and Philip D. Cady, TE1:Feb 75:65:11102
High-Temperature Drying of Thick Concrete Slabs, Harshavordhan C. Mehta, Wai F. Chen, John A. Manson and John W. Vanderhoff, TE2:May 76: 185:12102
Physical Properties of Premixed Polymer Concrete, Tse-Yung P. Chang and Howard L. Stephens, ST11:Nov 75:2293:11704
Polymer-Concrete Passes Toughest Test, Austin H. Emery and Meyer Steinberg, CE:June 76:61
Polymer-Impregnated Concrete: Field Studies, Harshavardhan C. Mehta, John A. Manson, Wai F. Chen and John W. Vanderhoff, TE1:Feb 75:1: 11103

Polymerization
Physical Properties of Premixed Polymer Concrete, Tse-Yung P. Chang and Howard L. Stephens, ST11:Nov 75:2293:11704

Polymers
High-Rate Water Treatment: The State-of-the-Art, Paul H. King, Robert L. Johnson, Clifford W. Randall and Glenn W. Rehberger, EE4:Aug 75:479: 11531
Ice Removal From the Walls of Navigation Locks, Guenther E. Frankenstein, James L. Wuebben, H. H.G. Jellinek and R. Yokota, WW76:Aug 76:1487

Polyvinyl Chloride
The Corrosion of Coated Steel Piles in the Ocean, E. Escalante, W. P. Iverson and W. F. Gerhold, Preprint No.2733, Apr 76, 22pp.

Ponding
Deflection and Ponding of Steel Joists, R. Richard Avent, ST7:July 76:1399:12241
Rainwater Ponding on Beam-Girder Roof Systems, R. Richard Avent and William G. Stewart, ST9: Sept 75:1913:11564

Ponds
Hydraulic Modeling of Shallow Cooling Ponds, Jean-Claude Tatinclaux, Subhash C. Jain and William W. Sayre, PO1:July 75:43:11415
Makeup Requirements for Cooling Ponds, John C. Sonnichsen, Jr., EE1:Feb 75:15:11114

Pontoon Bridges
Evergreen Point Bridge Maintenance Problems, Colin B. Brown, D. R. Christensen and G. F. Demich, ST76:Aug 76:189

Population
Environment — 25 Years Ahead, Ira L. Whitman, CE:Jan 76:52
Integrated Evaluation Programs, Irving Hand, UP1: Aug 76:117:12334
Integrated Evaluation Programs for Fairfax County, Va., Jim Reid, UP1:Aug 76:137:12332
Internal Migration Models and Population Forecasts, Hatim M. Hajj, UP2:Nov 75:201:11680

Population (Statistics)
New Growth Centers—A Role for the Bureau of Reclamation, Victor A. Koelzer, WR2:Nov 76:311: 12576
Trip Production Forecasting Models for Urban Areas, William J. Fogarty, TE4:Nov 76:831:12557

Population Growth
Analysis of Urban Transportation Criteria, Thabet Zakaria, TE3:Aug 75:521:11496
The Changing Scene, Harold E. Nelson, UP1:Aug 76: 3:12307
Pilot Plant Program — Treatment of NYC Water Supply, George P. Fulton and Edward A. Bryant, CE:June 76:52
Population Balance Use in Dilute Impurity Problems, John D. Stevens and Paul M. Schierholz, EE2:Apr 76:337:12034
Traffic Generation from Land Development Proposals, Satish C. Sharma and Afifi H. Soliman, TE2:May 76:243:12153

Population Migrations
British New Towns and the Civil Engineer, Tom Walsh, CE:Mar 75:84
Internal Migration Models and Population Forecasts, Hatim M. Hajj, UP2:Nov 75:201:11680
Modeling Social Impacts of Urban Highways, David C. Colony and Abul B. Shah Alam, TE2:May 76: 395:12148
Population Change: An Indicator of Freeway Impact, Pai-kang Wang, George L. Peterson and Joseph L. Schofer, TE3:Aug 75:491:11492

Pore Pressure
Consolidation with Internal Pressure Generation, John T. Christian, TN: GT10:Oct 76:1111:12445
Earth Pressures Measured with Hydraulic Piezometers, A. D.M. Penman, GT75:June 75:II-361
In-Situ Pore Presure Measurements at Rio Blanco, John R. Banister, Robert Pyke, D. Maxwell Ellett and Leon Winters, GT10:Oct 76:1073:12471
Instrumentation for Wave Induced Pore Pressures, James T. Dette, Vahan Tanal and Joseph A. Fischer, OE75:June 75:355
On Load Tests in Soft Clays, Bernd R. Thamm, NMG:June 76:I-557
Plasticity and Some of Its Corollaries in Soil Mechanics. Collapse and Continuing Deformation Under Load Repetition, Olgierd C. Zienkiewicz, NMG:June 76:III-1275
Pore Pressure Sounding Instrument, Bengt-Arne Torstensson, GT75:June 75:II-48

Pores
Hydrology of Porous Pavement Parking Lots, Thomas J. Jackson and Robert M. Ragan, HY12: Dec 74:1739:11010

Pore Water Pressure
Analysis of Consolidation in Cores of Earth Dams, Zdenek Eisenstein, Addanki V.G. Krishnayya and Steven T.C. Law, NMG:June 76:II-1089
Anisotropy and Stress Reorientation in Clay Under Load, Hideki Ohta and C. Peter Wroth, NMG:June 76:I-319
Constitutive Laws for Sand in Dynamic Shear, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, NMG:June 76:I-270
Electro-Osmotic Consolidation of Soils, Tai-Yeu Wan and James K. Mitchell, GT5:May 76:473:12156
Pore and Eroding Fluid Influences on Surface Erosion on Soil, Kandiah Arulanandan, Paripurnanandan Loganathan and Ray B. Krone, GT1:Jan 75:51:11078
Pore Pressures Near Moving Underwater Slope, Karel L. Meijer and Adriaan G. van Os, GT4:Apr 76:361:12021
Pore-Water Pressure Changes during Soil Liquefaction, H. Bolton Seed, Philippe P. Martin and John Lysmer, GT4:Apr 76:323:12074
Pumping of Aquifer with Viscoelastic Properties, Wilfried Brutsaert and M. Yavuz Corapcioglu, HY11:Nov 76:1663:12541
Seismic Response and Liquefaction of Sands, W. D. Liam Finn, Peter M. Byrne and Geoffrey R. Martin, GT8:Aug 76:841:12323
Stability of Embankment on Clay, Tien H. Wu, William B. Thayer and Sheng S. Lin, GT9:Sept 75: 913:11584
Variational Principles for Finite Element Analysis of Consolidation, Ranbir S. Sandhu, NMG:June 76:I-20

Porosity
Dewatering Rock for Construction, George F. Sowers, GT76:Aug 76:200
Porous Breakwater for Circulation Study of Harbors, G. Mavrigian and Simsek Sarikelle, OE75:June 75: 668

Porous Materials
Gravity Waves Propagated over Permeable Bottom, Stanislaw R. Massel, WW2:May 76:111:12107

Porous Media
Comparison of Numerical Schemes, John C. Bruch, Jr. and Roland W. Lewis, NMG:June 76:I-115
Hydrodynamics of Perched Mounds, Richard R. Brock, HY8:Aug 76:1083:12305
Non-Linear Flow and Deformation Analysis of Consolidated Problems, Roland W. Lewis, G. W. Roberts and Olgierd C. Zienkiewicz, NMG:June 76:II-1106
Radial Dispersion Through Adsorbing Media, Anand Prakash, HY3:Mar 76:379:11995
Review of Selected Topics in Finite Element Analysis, Robert D. Cook, ST76:Aug 76:535
Solutions for Unconfined Non-Darcy Seepage, Raymond E. Volker, IR1:Mar 75:53:11203
Study of Fluid Movements through Causeway, Ralph Ta-Shun Cheng and Min-Hsiung Hu, HY1: Jan 75:155:11076
Wave Induced Pressures in Permeable Seabeds, Hermann Moshagen and Alf Torum, WW1:Feb 75: 49:11099
Wave Transmission through Porous Structures, Ole Secher Madsen, WW3:Aug 74:169:10714

Porous Media Flow
Solutions for Unconfined Non-Darcy Seepage, Raymond E. Volker, IR1:Mar 75:53:11203
Steady Non-Darcian Seepage Through Embankments, P. Basak, IR4:Dec 76:435:12623

Ports
Determining Needs and Benefits of an Island Port Project Under U.S. Army Corps of Engineers Regulations, Jimmy B. Allen, WW76:Aug 76:316
Early American Riverports, Robert H. Allan, Preprint No.2783, Sept 76, 26pp.
Early Crises in the Port of Boston, James R. Cass, Jr., Preprint No.2774, Sept 76, 25pp.
International Law and Superport Development, Amos C. Dawson, OE75:June 75:1462
Introduction to Colonial Ports, Richard L. Schultz, Preprint No.2774, Sept 76, 6pp.
Luncheon Remarks at Ocean Engineering III, Robert I. Price, OE75:June 75:1485
Ocean Engineering in the Design of Sea Islands, Michael J. McCarthy, Edward J. Schmeltz and Joseph Bonasia, OE75:June 75:762
The Port of Philadelphia — Past and Present, Clarence F. Wicker, Preprint No.2774, Sept 76, 20pp.

Sand Bypassing with Split-Hull Self-Propelled Barge Currituck, W. H. Sanderson, DIEE:Jan 76:163

Potable Water
The Floating Cover: Best Way to Cover a Finished-Water Reservoir?, Eugene E. Dallaire, CE:June 75:75
Upflow Filter for Potable Water Production, Ben J. Haney and Stephen E. Steimle, EE4:Aug 75:489:11511

Potential Energy
Estimating Damping of Real Structures, Jon D. Raggett, ST9:Sept 75:1823:11554
Ritz Solutions for Thermoelastic Cylinders, Theodore R. Tauchert, EM5:Oct 76:825:12459

Potential Theory
Ground-Water Recharge Simulation, Abnish C. Amar, HY9:Sept 75:1235:11588

Power
ASCE and Nuclear Power Plants, Arthur J. Fox, Jr., EI3:July 76:279:12259
The Dissipation of Excess Heat from Water Systems, Harvey E. Jobson, PO1:May 73:089:9702
Dry-Wet Tower Evaporation and Fog Psychometrics, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:21:11828
Economics of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO2:Nov 76:147:12515
Fish Impingement at Monticello Nuclear Plant, Laurence M. Grotbeck and James L. Bechthold, PO1:July 75:69:11409
Flood Protection of Crystal River Unit 3 Nuclear Plant, Ronald M. Noble and Bert Simpson, PO1:July 75:85:11458
Hydraulic Modeling of Shallow Cooling Ponds, Jean-Claude Tatinclaux, Subhash C. Jain and William W. Sayre, PO1:July 75:43:11415
Impact Assessment of Power Plants, D. Joseph Hagerty and John E. Heer, PO1:Jan 76:81:11823
Integrated River System Operation in a Major Flood, Alfred J. Cooper and Clifford A. Roberts, PO1:Jan 76:63:11825
Interaction of Soil and Power Plants in Earthquakes, Jeremy Isenberg and Samy A. Adham, PO2:Oct 72:273:9242
Minimum Unit Stream Power and Fluvial Hydraulics, Chih Ted Yang, HY7:July 76:919:12238
Nuclear Power Plant Cooling System Selection, Stephen C. Ko, PO1:July 75:55:11405
Optimal Development of Multipurpose Hydro Projects, Phillip R. Hoffman, PO1:July 74:43:10655
River Response to Development, Everett V. Richardson and Daryl B. Simons, WW76:Aug 76:1285
Role of Offshore Nuclear Power Plants, Joseph A. Fischer and Harcharan Singh, PO1:July 75:1:11407
Runner Diameter of Tubular Turbines, Ekkehard Heinemann, Klaus-Dieter Kraft and Gerhard Rouve, PO1:Jan 76:53:11833
Scope of Socio-Economics Considerations, E. J. Schmidt, EFEEC:Aug 75:272
Seismic Design Spectra for Nuclear Power Plants, Nathan M. Newmark, John A. Blume and Kanwar K. Kapur, PO2:Nov 73:287:10142
Seismic Supports for Electrical Cable Systems, Anil K. Kar and Sitansu S. Sinha, PO1:July 75:95:11464
Session VI — Socio-Economic Problems, Conception Tan, EFEEC:Aug 75:421
Simple Flume for Guidance and Impingement Studies, James L. Congleton and Ronald D. Mayo, PO1:July 75:35:11416
Stability and Dynamic Analyses of Cooling Tower, Chang-hua Yeh and William Y.J. Shieh, PO2:Nov 73:339:10141
Start-Up Performance, Hyatt-Thermalito Power Complex, Haywood G. Dewey, Jr., Robert W. Ehrhart and William H. Young, PO2:Nov 73:405:10169
State-of-the-Art of Geothermal Reservoir Engineering, Patrick K. Takahashi, Bill H. Chen, Ken I. Mashima and Arthur S. Seki, PO1:July 75:111:11455
Statistical Aspects of Containment Tendon Surveillance, Mahendra P. Singh and Adolf Walser, PO1:July 75:23:11406
Statistical Design Basis for Submerged Diffuser, Thomas E. Pease and Michael J. Skelly, PO1:July 75:11:11408
Stresses in Concrete Around Spiral Case, Prem S. Nigam, Om P. Jain and Madhu B. Kanchi, PO1:Jan 76:95:11845
Test Method for Seismic Qualification of Equipment, Michael de Estrada, PO1:July 74:97:10656
Thermodynamic Models of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:1:11829
Three-Dimensional Analysis of Hydroelectric Power Station, Prem S. Nigam, Om P. Jain and Mahesh B. Kanchi, PO1:Jan 76:35:11830
Transient Hydrothermal Analysis of Small Lakes, Lawrence A. Loziuk, James C. Anderson and Ted B. Belytschko, PO2:Nov 73:349:10150
Transmission Towers Under Torsional Loads, Albert W.G. Hanna and Richard G. Redwood, PO1:May 73:105:9701
Utilization and Control of Rivers in the Southwest, George A. Whetstone, WW76:Aug 76:1149
Vertical Seismic Response Spectra, Paul C. Rizzo, Donald E. Shaw and Matthew D. Snyder, PO1:Jan 76:121:11858

Powerhouses
Structures for Power Stations in Ontario, Canada, Wojciech A. Krajewski, PO2:Nov 76:179:12527

Powerplants
Citizens Groups and Public Participation: Problems and Observations, Jonathan N. Brownell, EFEEC:Aug 75:388
Community Development Implications of Energy Complex Construction, C. R. Cavanagh, EFEEC:Aug 75:280
Construction Cash Flow Management System, Kenneth F. Reinschmidt and Walter E. Frank, CO4:Dec 76:615:12610
Design Spectra for Nuclear Power Plants, Ricardo A. Guzman and Paul C. Jennings, PO2:Nov 76:165:12521
Desirable Modifications in Regulatory and Licensing Activities, Gerald Charnoff, EFEEC:Aug 75:356
Determining Ambient Water Temperatures, Mark Markofsky and Roger C. Binkerd, HY3:Mar 75:361:11171
Economics of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO2:Nov 76:147:12515
Energy Complexes: The Federal Government's Views, R. Michael Hartman, EFEEC:Aug 75:334
Experimental Methods and Instrumentation for Power Generation Structures — Some Case Studies, Joseph W. Fortey and Raymond R. Funk, Preprint No.2717, Apr 76, 25pp.
Factoring in Public Participation: Suggestions for Industry, Henry Herrmann, EFEEC:Aug 75:394
Foundation Considerations for a Nuclear Power Plant, George A. Faillace, CO1:Mar 75:165:11181
Foundation of the Sirikit Powerhouse, James D. Gill and Leib Wolofsky, GT76:Aug 76:82
Generation of Seismic Floor Spectra, Mahendra P. Singh, EM5:Oct 75:593:11651
A History of Bureau of Reclamation Construction-Part II, Harold G. Arthur, CO1:Mar 75:69:11190
Inflatable Dam Regulates River Level, Robert A. Gunnerson, CE:Feb 76:83
Local and Regional Economic Impacts of Energy Complexes, Courtney Riordan, EFEEC:Aug 75:312
Long-Term Operation of Storage Hydro Projects, W. F. Caselton and Samuel O. Russell, WR1:Apr 76:163:12089
Marine Ecological Impacts Associated with Power Plant Activities, B. J. Copeland and Frank N. Moseley, EFEEC:Aug 75:250

New Approach to Site Selection Studies, W. Ray Seiple, PO1:July 74:63:10643
NO_x Emissions from Stationary Combustion Sources, James J. Stukel, Chmn., EE3:June 74:641:10581
Past and Future of Construction Equipment — Part III, James Douglas, CO4:Dec 75:699:11778
Public Participation and Energy Complexes: An Overview, Benjamin C. Dysart, III, EFEEC:Aug 75:365
Public Participation from a Utility's Viewpoint: Benefits and Problems, Henry W. Cheney, EFEEC: Aug 75:373
Public Participation in the Fuel Cycle: Experiences and Perspectives, Robert E. Olson, EFEEC:Aug 75: 381
Sediment Control at Streamside Power Plants, Gary L. Lewis and Ralph R. Marlette, WW76:Aug 76: 1592
Session II — Land Use, Charles A. Dewey, Jr., EFEEC:Aug 75:408
Session I — Objectives (Introduction), Jan C. Philips, EFEEC:Aug 75:404
Session V —Ecology, C. Leland Rogers, EFEEC:Aug 75:417
Session VIII — Public Participation, Kenneth F. Rosanski, EFEEC:Aug 75:428
Session VI — Socio-Economic Problems, Conception Tan, EFEEC:Aug 75:421
Simple Flume for Guidance and Impingement Studies, James L. Congleton and Ronald D. Mayo, PO1:July 75:35:11416
State Government Views of Licensing Energy Complexes, Sheldon A. Schwartz, EFEEC:Aug 75: 345
Statistical Aspects of Containment Tendon Surveillance, Mahendra P. Singh and Adolf Walser, PO1:July 75:23:11406
Thermodynamic Models of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:1:11829

Power Supplies

Simulation of Future River Fluctuations, Douglas D. Speers, WW76:Aug 76:608

Power Transmission Lines

The Le Grande Hydroelectric Development, Gilles Bergevin and Richard N. Seemel, CE:Sept 76:60
Rectangular Finite Element for Field Problems, Bruce W. Golley, EM3:June 76:431:12175
Utility Land Corridors Location Model — Environmental Assessment, Thomas E. Wester and Dennis W. Weeter, Preprint No.2653, Apr 76, 29pp.

Precipitation

Chow's General Hydrologic Model, Fazal H. Chaudhry, Maria A. Simoes and Walter M. Ferreira Filho, TN: HY9:Sept 76:1387:12368

Precipitation (Atmospheric)

An Event-Based Formulation of Watershed Management, Martin M. Fogel, Lucien Duckstein and Andre Musy, IR76:July 76:349

Precipitation (Chemistry)

Population Balance Use in Dilute Impurity Problems, John D. Stevens and Paul M. Schierholz, EE2:Apr 76:337:12034
Sanitary Landfill Leachates and Their Leachate Treatment, Edward S.K. Chian and Poppe B. DeWalle, EE2:Apr 76:411:12033

Precision

Control Densification by Analytic Photogrammetry, Wesley V. Hull, SU1:Oct 75:11:11624

Preconsolidation

Electro-Osmotic Consolidation of Soils, Tai-Yeu Wan and James K. Mitchell, GT5:May 76:473:12156

Predictions

America's Energy Futures, Monte Canfield, Jr., EFEEC:Aug 75:6
Computer Graphics, Treatment for the Terminal Illness, H. N. Christiansen, Preprint No.2765, Sept 76, 20pp.
Consideration of Other Techniques, Robert V. Whitman, STN75:Dec 75:II-257
Developing Alternative Futures, John M. Courtney, UP1:Aug 76:49:12337
Extreme Wave Heights for Cleveland Harbor, D. T. Resio, OE75:June 75:62
Finite Element Technology for Predicting Nonlinear Behavior of Structures, Robert J. Melosh and F. Hatt, Preprint No.2765, Sept 76, 20pp.
Flow Regulation Effects on Stream Flow Prediction, Carl Mark Koch, WW76:Aug 76:627
The Future of Highways From the Mass Transit Viewpoint, E. L. Tennyson, Preprint No.2751, Sept 76, 17pp.
Heat Disposal in Water Environment, Donald R.F. Harleman, HY9:Sept 75:1117:11585
Hydraulics of Sheet Flow in Wetlands, Bent A. Christensen, WW76:Aug 76:746
Longitudinal Dispersion Coefficients for Streams, Subhash C. Jain, EE2:Apr 76:465:12037
Numerical Prediction of Thermal-Regime of Rivers, Poothrikka P. Paily and Enzo O. Macagno, HY3: Mar 76:255:11997
Pollution Prediction Model of Long Island Sound, Malcolm J. Bowman, OE75:June 75:1084
Predicting Estuarine Salinity from River Inflows, James A. Harder, Preprint No.2674, Apr 76, 23pp.
Predicting Material Transportation in Mobile Bay, Gary C. April, Samuel Ng, Hua-An Liu and Donald O. Hill, DIEE:Jan 76:833
Predictions of the Hydraulic and Morphological Changes of the "La Grande Riviere" Lower Reach System, Marcel Frenette and Octave Caron, WW76:Aug 76:1229
Present and Future Trends in Harbor and Port Facilities, Billy E. Smith, Preprint No.2814, Sept 76, 10pp.
Procedures for Evaluation of Earthquake Risk to Buildings, R. Martin Czarnecki, E. C. Wang and Sigmund A. Freeman, Preprint No.2804, Sept 76, 28pp.
Reaeration and Velocity Prediction for Small Streams, Edward G. Foree, EE5:Oct 76:937:12448
Some Aspects of Theory and Applications of Numerical Methods, Chandrakant S. Desai, NMG: June 76:1-58
Transportation for the 1980's and Its Effect on Energy, the Economy and the Environment, James T. Sullivan, Preprint No.2816, Sept 76, 4pp.
Two Hundred Years—and More—of Engineering in the United States, Charles A. Parthum, EI4:Oct 76: 423:12506

Prefabricated Bridges

Falsework Eliminated in Bridge Erection, Gene K. Hallock, CE:Nov 76:58

Prefabrication

Automated Analysis of Standard Buildings, Norman R. Maham, ST4:Apr 75:751:11265
Preassembled Steel Space Frame Bridge, Michael M. Sprinkel and David Morris, TN: CO3:Sept 76:561: 12371
The University of Idaho Stadium: A Micro-Lam Application, Sherman A. Nelson, Preprint No.2800, Sept 76, 19pp.

Preloading

Recording Rapid Settlement by the Oedometer, David M. McCann, Jon Darwell and Bruce Denness, OE75:June 75:401

President's Award

Gen. Clay is First Recipient of President's Award, CE:Oct 76:96

Pressure

Fluid-Dynamic Excitation Involving Flow Instability, Wallace W. Martin, Eduard Naudascher and Mahadevan Padmanabhan, HY6:June 75:681:11361

Form Pressure and Relaxation in Formwork, Myron Levitsky, EM3:June 75:267:11379
Numerical Analysis of Rigid Pavement Resting over Hookean Subgrade Continuum, Madan G. Arora and Sudarshan K. Khanna, NMG:June 76:I-511
Oblique Impingement of Plane Turbulent Jets, Spyridon Beltaos, HY9:Sept 76:1177:12388

Pressure Cells
Earth Pressure on Precast Panel Retaining Wall, Harry M. Coyle and Richard E. Bartoskewitz, GT5: May 76:441:12113

Pressure Distribution
Earth Pressure on Precast Panel Retaining Wall, Harry M. Coyle and Richard E. Bartoskewitz, GT5: May 76:441:12113
Form Pressure and Relaxation in Formwork, Myron Levitsky, EM3:June 75:267:11379
Wave Induced Pressures in Permeable Seabeds, Hermann Moshagen and Alf Torum, WW1:Feb 75: 49:11099

Pressure Field Detection
Pressure Field at Deep Depth due to Surface Motion, J. D. Lin and Edward Y.T. Kuo, OE75:June 75: 1276

Pressure Gages
Lateral Earth Pressure at Rest in Soft Clay, K. Rainer Massarsch and Bengt B. Broms, GT10:Oct 76:1041:12476

Pressure Gradients
Effect of Drains on Pressures Below Structures, Amrik S. Chawla, GT1:Jan 76:15:11827

Pressure Measurement
In Situ Measurement of Soil Properties, Harvey E. Wahls, Chmn., GT75:June 75
Measurement of In Situ Strength, John H. Schmertmann, GT75:June 75:II-57
Predicting Deformation in the Fort Union Formation, Van A. Silver, Samuel P. Clemence and Richard W. Stephenson, GT76:Aug 76:13
Pressuremeter and Laboratory Test Correlations for Clays, Robert G. Lukas and Bruno LeClerc de Bussy, GT9:Sept 76:945:12410

Pressure Pipes
A Fail-Safe Subaqueous Concrete Sewer, Gerald G. Emerson, CE:Sept 75:77

Pressure Reduction
Pressure Reducing Valves in Pipe Network Analysis, Roland W. Jeppson and Allen L. Davis, HY7:July 76:987:12252

Pressure Responses
Pressure Effects on Great Lakes Vertical Control, Frank H. Quinn, SU1:Dec 76:31:12605

Pressure Vessels
Analysis of Torispherical Pressure Vessels, Ganapathy V. Ranjan and Charles R. Steele, EM4: Aug 76:643:12335

Pressure Waves
Ventilated Approach Regions for Railway Tunnels, Alan E. Vardy, TE4:Nov 75:609:11691

Pressurized Water Reactors
Construction of Post-Tensioned PWR Containments, Kurtz L. Paulson, CO1:Mar 76:213:11981
Structural Design of Nuclear Plant Facilities, John D. Stevenson, Chmn., SDNPF:Dec 73

Prestressing
Displacements and Losses in Multistage Prestressed Members, Amin Ghali, Romy G. Sisodiya and Gamil S. Tadros, ST11:Nov 74:2307:10968
Fifty-Year Advancement in Concrete Bridge Construction, Tung. Y. Lin and Felix Kulka, CO3: Sept 75:491:11558
Long Line Production of Building Elements in United States, Ross H. Bryan, CO1:Mar 75:143: 11188
Prestressed Composite Continuous Bridge Girder, Subhash C. Anand and Clarence J. Fennell, III, TN: ST1:Jan 76:313:11821
Prestressed Strip on Elastic Foundation, George J. Tsamasfyros and Pericles S. Theocaris, TN: EM5: Oct 76:927:12443
Some Applications of Prestressing in Foundation Construction, Ingvar Schousboe, CO2:June 75:403: 11395

Preventive Maintenance
Economics of Preventive Highway Maintenance, LaRue E. Delp, CE:Dec 76:43

Prices
Computer Pricing Policy and Methods, Norman R. Greve, Chmn., EI4:Oct 76:437:12505
Impact of Flooding on Land Transfer Prices, Wayne E. Boyet, Kenneth W. Hollman and Wayne L. Sterling, WW76:Aug 76:127

Pricing
Analysis of Metered Taxi Fares, David Ghahraman, Tung Au and Dwight M.B. Baumann, TE4:Nov 75: 807:11735
Competition in the Transportation Industry, Dayle M. Clark and James J. Schwarzwalder, TE3:Aug 76:489:12290
Computer Pricing Policy and Methods, Norman R. Greve, Chmn., EI4:Oct 76:437:12505
Computer Usage and Pricing Alternatives for Consultants, Norman R. Greve, EI2:Apr 75:93: 11237
Cost and Pricing Relationships in Water Supply, Robert M. Clark, EE2:Apr 76:361:12025
Impact of Flooding on Land Transfer Prices, Wayne E. Boyet, Kenneth W. Hollman and Wayne L. Sterling, WW76:Aug 76:127

Primary Consolidation
Consolidation of Fibrous Peat, Peter L. Berry and Brian Vickers, GT8:Aug 75:741:11493

Primary Productivity
Segmented Population Model of Primary Productivity, Guenton C. Slawson, Jr. and Lorne G. Everett, EE1:Feb 76:127:11945

Prime Factors
Architects and Nature: On the Primacy of Man, Eric Hoffer, EFAN:Dec 74:8
Summary for Session II - Human Factors Affecting the Constructed Environment, Kevin E. Coray and Ronald W. Petersen, EFAN:Dec 74:249

Priorities
Planning Water Resources Research Programs, John S. Gladwell, WR1:Apr 76:3:12072

Probability
Construction Cash Flow Management System, Kenneth F. Reinschmidt and Walter E. Frank, CO4:Dec 76:615:12610
Multivariable Flood Level Frequency Distribution, David L. Strelchuk, HY12:Dec 76:1737:12637

Probability Density Functions
Hydraulic Modeling of Shallow Cooling Ponds, Jean-Claude Tatinclaux, Subhash C. Jain and William W. Sayre, PO1:July 75:43:11415
Wind Pressures on Buildings-Probability Densities, Jon A. Peterka and Jack E. Cermak, ST6:June 75: 1255:11373

Probability Distribution Functions
Influence of Wave-Current Interactions on Fluid Forces, Chi C. Tung, Preprint No.2706, Apr 76, 12pp.
Probability Analysis of Deep Water Breaking Waves, John H. Nath and Fred L. Ramsey, Preprint No.2691, Apr 76, 10pp.

Probability Distributions of Extreme Wind Speeds, Emil Simiu and James J. Filliben, ST9:Sept 76: 1861:12381
Wind Climate and Failure Risks, Emil Simiu, ST9: Sept 76:1703:12389
Wind Pressures on Buildings-Probability Densities, Jon A. Peterka and Jack E. Cermak, ST6:June 75: 1255:11373

Probability Theory

Analysis of Activity Networks under Uncertainty, Alfredo H-S. Ang, Jamal Abdelnour and Amal A. Chaker, EM4:Aug 75:373:11514
Approximation to First Passage Probability, Jann-Nan Yang, EM4:Aug 75:361:11502
Concrete Material Response by Acoustic Spectra Analysis, Demeter G. Fertis, ST2:Feb 76:387:11943
Delphic Predictions and Cross Impact Simulation, Jarir S. Dajani and Gorman Gilbert, UP1:May 75: 49:11316
Diffusion of Probability Mass and First Passage Probability, Jann-Nan Yang, EM5:Oct 75:639: 11654
Earth Slope Reliability by a Level-Crossing Method, J. Morla Catalan and C. Allin Cornell, GT6:June 76:591:12214
Effects of Surface Fluctuations on Wave Field Statistics, Chi C. Tung and Keikhosrow Pajouhi, Preprint No.2705, Apr 76, 17pp.
First Passage Probability for Nonlinear Oscillators, J. Brian Roberts, EM5:Oct 76:851:12469
Gates' Bidding Model—A Monte Carlo Experiment, Marvin Gates, CO4:Dec 76:669:12631
Guide Criteria to Bridge and Permit Loads, David J. Chang, ST76:Aug 76:170
LOMARK: A Bidding Strategy, Richard Louis Wade and Robert B. Harris, CO1:Mar 76:197:11961
Long-Term Operation of Storage Hydro Projects, W. F. Caselton and Samuel O. Russell, WR1:Apr 76: 163:12089
Modeling Method Productivity, James J. Adrian and LeRoy T. Boyer, CO1:Mar 76:197:11983
Optimum Design for Infrequent Disturbances, Emilio Rosenblueth, ST9:Sept 76:1807:12433
Predicting Wind-Induced Response in Hurricane Zones, Bjarni V. Tryggvason, David Surry and Alan G. Davenport, ST12:Dec 76:2333:12630
Preliminary Dynamic Assessment of Deepwater Platforms, Paul H. Wirsching and Peter H. Prasthofer, ST7:July 76:1447:12264
Probabilistic Analysis and Design of a Retained Wall, Kaare Hoeg and Ramesh P. Murarka, GT3:Mar 74: 349:10436
Probabilistic Analysis of Elastoplastic Structures, Thomas L. Paez and James T.P. Yao, EM1:Feb 76: 105:11914
Probabilistic Analysis of Fiber-Reinforced Concrete, Antoine E. Naaman, Fred Moavenzadeh and Frederick J. McGarry, EM2:Apr 74:397:10491
Probabilistic Approach to Design of Riprap for River Bank Protection, Ruh-Ming Li, Daryl B. Simons, Paul H. Blinco and Md. Abdus Samad, WW76:Aug 76:1572
A Probabilistic Design Approach Using the Palmgren-Miner Hypothesis, Paul H. Wirsching and James T.P. Yao, ST76:Aug 76:324
Probabilistic Time Scheduling, Keith C. Crandall, CO3:Sept 76:415:12398
Probability of Failure of Building from Fire, Raymond H. Burros, ST9:Sept 75:1947:11567
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, Preprint No.2687, Apr 76, 28pp.
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, EM6:Dec 76:1041: 12640
Reliability Theory of Deteriorating Structures, Hiroyuki Kameda and Takeshi Koike, ST1:Jan 75: 295:11079
Response of a Column in Random Vibration Tests, Gene K. Baxter and Ross M. Evan-Iwanowski, ST9:Sept 75:1749:11568
Response of Structures to Random Wind Forces, Michael J. O'Rourke, Richard A. Parmelee and Ross B. Corotis, ST12:Dec 75:2557:11786
Safety Factor Evaluation for Single Piles in Sand, James Neil Kay, GT10:Oct 76:1093:12494
The Safety of Structural Steel Columns, Reidar Bjorhovde, Preprint No.2809, Sept 76, 27pp.
Seismic Risk Analysis of Boston, C. Allin Cornell and Hans A. Merz, ST10:Oct 75:2027:11617
Sheet Pile Interlock Tension-Probabilistic Design, James Neil Kay, GT5:May 76:411:12122
Simulation Model for Tunnel Construction Costs, Fred Moavenzadeh and Michael J. Markow, CO1: Mar 76:51:11967
Stability of Embankment on Clay, Tien H. Wu, William B. Thayer and Sheng S. Lin, GT9:Sept 75: 913:11584
Statistical Aspects of Containment Tendon Surveillance, Mahendra P. Singh and Adolf Walser, PO1:July 75:23:11406
Statistics of Random Wave Field, Keikhosrow Pajouhi and Chi C. Tung, WW4:Nov 75:435:11734
Stochastic Characteristics of Sediment Motions, Hin Fatt Cheong and Hsieh W. Shen, HY7:July 76: 1035:12269
Stochastic Considerations in Thunderstorm Modeling, Ross B. Corotis, HY7:July 76:865:12231
Stochastic Models of Sediment Motion on Flat Bed, Che S. Hung and Hsieh W. Shen, HY12:Dec 76: 1745:12639
Time-Dependent Spectral Content of System Response, Ross B. Corotis and Erik H. Vanmarcke, EM5:Oct 75:623:11648
Tornado Design Winds Based on Risk, Robert C. Garson, Jose Morla Catalan and C. Allin Cornell, ST9:Sept 75:1883:11559
Towards Optimum Design Through Building Codes, Emilio Rosenblueth, ST3:Mar 76:591:11999
The Translation of Research Results Into Practice, George Bugliarello, IR76:July 76:1
Wet and Dry Periods of Annual Flow Series, Zekai Sen, HY10:Oct 76:1503:12457

Probable Error

Sensitivity of Trip Distribution to Subarea Focusing, Nancy L. Nihan and Jacques Lassabliere, TE3:Aug 76:555:12317

Procurement

A Statement on Professional Services—Competitive Bidding, Gerald L. Devlin, EI1:Jan 75:53:11082

Productivity

Atmospheric Reaeration in a River Using Productivity Analysis, George M. Hornberger and Mahlon G. Kelly, EE5:Oct 75:729:11644
The Construction Manager's Impact on Productivity, Edward W. Peterson, PROD:Aug 76:99
Construction Productivity — How to Improve It, CE: Oct 76:57
Education, Research, and Productivity in Construction, Boyd C. Paulson, Jr., PROD:Aug 76: 187
The Effect of Regulations on Productivity as Viewed by the Engineer, Billy T. Sumner, PROD:Aug 76: 219
The Effect of Regulations on Productivity, J. C. Turner, PROD:Aug 76:257
Improving Productivity in Industrial Construction, John D. Borcherding, CO4:Dec 76:599:12595
Increased Productivity Through Effective Public Information, Michael J. Scanlon, PROD:Aug 76: 177
The Interstate Era of Highway Construction, Wesley S. Mendenhall, Jr., Preprint No.2793, Sept 76, 21pp.
Management Processes and Their Affect on Productivity, Chris F. Woods, PROD:Aug 76:113
Modeling Method Productivity, James J. Adrian and LeRoy T. Boyer, CO1:Mar 76:197:11983
National Environmental Policies and the Effect on Productivity Through Regulation, Norman E. Hill, PROD:Aug 76:277

New Productivity Improvement Strategies for the Engineering/Construction Industry, Arnold S. Judson, PROD:Aug 76:49
Productivity and the Construction Grants Program for Wastewater Treatment Works: An EPA View, Harold P. Cahill, Jr., PROD:Aug 76:205
Productivity as Influenced by Design Management Processes, Winfield O. Salter, PROD:Aug 76:1
Productivity Improvements Achieved in Navy Public Works Operations, Albert R. Marschall, PROD: Aug 76:135
Productivity in Engineering Design, Kenneth F. Reinschmidt, PROD:Aug 76:21
Project Communication and the Washington Metro System, William S. Alldredge, PROD:Aug 76:153
Regulations—Boon or Bane?, CE:Dec 76:73
Regulation/Strangulation — Contractor's Viewpoint, J. A. Judge, PROD:Aug 76:239

Professional Activities

Action Program for Elimination of Unethical Practices in the Engagement of Professional Services, John W. Frazier, Chmn., EI2:Apr 75:267: 11210
The Adopted ASCE Guide to Turnkey Construction Contracts, David L. Narver, Jr., EI2:Apr 75:235: 11249
Art in Engineering - The Need for a New Criticism, David P. Billington, PP4:Oct 73:499:10102
ASCE's Guidelines for Participation in Public Affairs Activities Four Years Later, David Novick, EI4: Oct 76:429:12500
Attitudinal Variables in Civil Engineering Design, Wilfred W. Recker and George C. Lee, EI1:Jan 76: 55:11862
Australian Metrication and the Engineer, Carter H. Harrison, Jr., EI2:Apr 76:199:12088
Building and Operating Costs Versus Rental Income, Clayford T. Grimm, EI3:July 76:355:12270
Building a Professionally Qualified Faculty, King S. Luk and Eugene H. Kopp, EI2:Apr 74:105:10466
Case Study of Burr Truss Covered Bridge, Emory L. Kemp and John Hall, EI3:July 75:391:11461
Citizen Inputs to Public Works Projects, Desmond M. Connor, EI1:Jan 76:29:11856
Civil Engineering Calculations Using SI Units, R. Ernest Leffel, EI1:Jan 76:99:11875
Civil Engineering Curricula: Well-Rounded or Overweight?, George K. Wadlin, EI2:Apr 76:159: 12083
Civil Engineering: Education and Practice, Emory L. Kemp, EI1:Jan 76:17:11868
Civil Engineering Management - Prerequisites and Objectives, Eugene J. Peltier, EI1:Jan 75:5:11060
The Code of Ethics of the American Society of Civil Engineers, Mario G. Salvadori, EI2:Apr 75:215: 11252
Communication Goals for Science and Engineering, S. H. Wittwer, EI2:Apr 76:183:12087
Community Acceptance of Highway Corridor Development, Douglas Nunn, EI3:July 75:337: 11414
Community Environmental Action Program for Civil Engineers, Gerald R. Dyson, Chmn., EI2:Apr 75: 259:11211
Computer Usage and Pricing Alternatives for Consultants, Norman R. Greve, EI2:Apr 75:93: 11237
Computing Education through Program Evaluation, John Y. Campbell, EI2:Apr 75:149:11240
A Construction Industry R&D Incentives Program, Donald C. Taylor, Joseph C. Kellogg and Michael C. Wilkinson, EI3:July 76:369:12271
Ecological Considerations in Transportation Systems, Beatrice E. Willard, EI3:July 75:329:11454
Effectiveness of Present Operating Procedures and of the PAC Structure, Leland J. Walker, EI2:Apr 75: 247:11268
Effect of Building Regulations on Built Environment, Daniel L. Schodek, EI3:July 76:293:12261
An Employer's Evaluation of Cooperative Education, Robert W. Richards, EI2:Apr 75:221:11238
The Engineering and Minority Community in Symbiosis, Sol E. Cooper, EI2:Apr 76:217:12078
The Engineering Computer Revolution—Over or Just Beginning, David E. Wojick, EI3:July 76:351:12276
Engineering Education for Engineering Practice, Cornelius Wandmacher, EI2:Apr 75:227:11250
Engineering Educator-Practitioner Interchange: Challenge, David Novick, EI1:Jan 76:21:11865
Engineering of Public Systems, Gorman Gilbert and Jarir S. Dajani, EI1:Jan 75:15:11068
Engineering Scheduling with Manpower Allocation, Jerome P. Miller, Jr., EI2:Apr 75:107:11255
Engineers and Computers — Interaction or Reaction, Richard L. Bland, EI2:Apr 75:79:11253
Engineer's Role in Environmental Issues, James L. Van Beveren, EI2:Apr 76:169:12085
Enlightened Employers' Continuing Education Policies, John P. Klus, Lowell B. Jackson and C. Allen Wortley, EI3:July 75:419:11428
Environmental Decision-Making and Facilities Siting, Michael S. Baram, EI2:Apr 76:211:12080
Environmental Impact Statements and Civil Engineering, Martin P. Wanielista, Waldron M. McLellon and Lawrence L. Smith, EI3:July 75:321: 11418
Evolving National Water Policies, Gary D. Cobb, EI3:July 75:375:11427
Half a Century of Soil Mechanics—Some Thoughts for the Future in the Light of the Past, Gregory P. Tschebotarioff, EI3:July 76:321:12251
Identifying Your Client, William L. Grecco and Thomas A. Dames, EI4:Oct 75:485:11663
Inductive Approaches to Structural Safety, Daniele Veneziano, EI1:Jan 76:81:11871
Information Models in Building Design Process, Alan D. Russell, EI2:Apr 75:133:11217
Issues and Problems in Urban Planning, Tung Au, EI3:July 75:305:11417
Kickbacks Versus Professional Ethics, Russel C. Jones, EI3:July 75:357:11420
Legal Liability and Highway Design and Maintenance, David C. Oliver, TE3:Aug 75:425: 11481
Local Land Use Workshops Help, Murray I. Mantell, CE:Oct 75:88
Methodology of Construction Industry Profiling: A Case History, Mark H. Jordan, EI1:Jan 76:67: 11864
Metrication—SI in America, Cornelius Wandmacher, EI1:Jan 75:25:11073
Motivating Students Towards Professional Thinking, Joseph M. DeSalvo, EI1:Jan 75:47:11081
New Sources of Power—Solar Energy, Peter E. Glaser, EI4:Oct 75:461.11661
Political Involvement of Civil Engineers, Allen W. Hatheway, EI1:Jan 76:11:11866
Predicting Demand for Engineered Facilities, James P. Romualdi, EI3:July 75:365:11426
Present and Future Directions in Design Education, Roger K. Seals and William J. Wilhelm, EI1:Jan 75: 37:11044
Professional Development—An Educator's Viewpoint, Alfred C. Ingersoll, EI4:Oct 75:471: 11660
Progress Report on Development of A Code of Ethics, Marvin W. Runyan, EI2:Apr 75:199:11225
Proposed Professional Advancement Recognition (PAR) Program, C. Allen Wortley, EI1:Jan 76:117: 11861
Providing the Profession with Design Programs, Eddie Y.L. Chien and Michael I. Gilmor, EI2:Apr 75:165:11261
Public Affairs in the Civil Engineer: A Guideline for Accomplishment, Jewell T. Wood, EI3:July 76:339: 12262
Public Versus Client Interests - An Ethical Dilemma for the Engineer, Terry L. Turnock, EI1:Jan 75:61: 11083
Report on Observations of Attendees at the EF Conference on 'Life Span of Structures', Michael N. Salgo, EI1:Jan 76:47:11870
Requirements of Professional Practice, David Novick, EI2:Apr 76:193:12086
Responding to Our Members' Educational Needs, Edward W. Timmons, Jr., EI1:Jan 76:41:11869

Salary Guidelines, Robert C. West, EI2:Apr 75:287: 11212
Social Responsibility Within the Present Code of Ethics, George C. Govatos, EI3:July 75:351:11412
Social Science Emphasis in Engineering Education, Dan H. Pletta, EI4:Oct 75:509:11664
Some Historic Bridges of the United States, Sara Ruth Watson, EI3:July 75:383:11425
Some Thoughts on Zero Discharge, Paul Fleming, EI2:Apr 76:179:12082
Statement of Affirmative Action Principles, Benito A. Sinclair, EI3:July 74:183:10688
A Statement on Professional Services—Competitive Bidding, Gerald L. Devlin, EI1:Jan 75:53:11082
Success Model for Minority Engineering Programs, Norman J. Johnson and E. Louis Overstreet, EI1: Jan 75:67:11084
Technical Information Processing Systems, William F. Bates, EI2:Apr 75:189:11254
Toward A More United ASCE, Elmer B. Isaak, EI1: Jan 76:7:11859
Trends in P.E. License Renewal Requirements, Robert D. Reckert, EI4:Oct 75:449:11667
The Trouble with Municipal Public Works, William E. Fendley, EI2:Apr 76:173:12077
Unique Team Effort on Washington Subway Project, Delon Hampton and David Novick, EI1:Jan 76: 129:11872
Viaducts—A Case Study, Rowland Richards, Jr. and David G. Elms, EI4:Oct 74:293:10845
We Created the Problem; Only We Can Solve It!, Jack R. Janney, EI3:July 75:429:11436
What Has ASCE Done for Me Lately, William M. Sangster, CE:Oct :80
When Is A Political Contribution Influence Buying?, Thomas J. McCollough, EI1:Jan 76:1:11860
1975 ASCE Salary Survey, Schaefer J. Dixon, Chmn., EI2:Apr 76:225:12090

Professional Advancement

Current Competence: Current Dilemma, Virginia Fairweather, CE:July 75:50
Enlightened Employers' Continuing Education Policies, John P. Klus, Lowell B. Jackson and C. Allen Wortley, EI3:July 75:419:11428
A Home-Study Program on Civil Engineering Management, Kenneth P. Buchert, CE:Mar 75:81
Kansas Solution to Unionism of Professionals, Bruce F. McCollum, EI3:July 76:283:12253
Motivating Students Towards Professional Thinking, Joseph M. DeSalvo, EI1:Jan 75:47:11081
Professional Development—An Educator's Viewpoint, Alfred C. Ingersoll, EI4:Oct 75:471: 11660
Proposed Professional Advancement Recognition (PAR) Program, C. Allen Wortley, EI1:Jan 76:117: 11861

Professional Development

Career Growth for the Professional Engineer, Lindon E. Saline, CE:Nov 75:56
The Making of a "Pro"—A Faculty Viewpoint, Dan H. Pletta, EI3:July 74:217:10645
Survey Program for Civil Works Projects, William A. Angeloni, SU1:Oct 75:121:11662

Professional Engineering

Building a Professionally Qualified Faculty, King S. Luk and Eugene H. Kopp, EI2:Apr 74:105:10466
Changing Responsibilities of the Professional Engineer in Public Works, James L. Ogilvie, EI3: July 76:345:12275
Conventional Versus Integrated Courses in Structural Analysis and Design, William G. Murphy and William J. Hall, ST76:Aug 76:997
Current Competence: Current Dilemma, Virginia Fairweather, CE:July 75:50
Education for the Professional Construction Manager, Mark H. Jordan and Robert I. Carr, CO3:Sept 76: 511:12392
Leadership Constraint in Project Preparation, Phillip Z. Kirpich, EI4:Oct 76:417:12503
Motivation of Students Towards Professional Thinking, Milton Alpern, EI3:July 75:413:11435
The Professional Engineer Half a Century Hence, Alfred C. Ingersoll, CE:Mar 75:74
Professional Engineers as Elected Local Officials, Kenneth R. Wright and Douglas T. Sovern, EI4: Oct 76:447:12504
The Trouble with Municipal Public Works, William E. Fendley, EI2:Apr 76:173:12077

Professional Personnel

How to Save for Retirement and Cut Income Tax, CE:Mar 76:70
Kansas Solution to Unionism of Professionals, Bruce F. McCollum, EI3:July 76:283:12253

Professional Practice

Building a Professionally Qualified Faculty, King S. Luk and Eugene H. Kopp, EI2:Apr 74:105:10466
Civil Engineers and Unions in Sweden, Robert D. Holtz, CE:Nov 75:53
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., Preprint No.2643, Apr 76, 10pp.
The Engineer's Response to Nonengineering Criticism of His Professional Work, John E. Spitko, Jr., EI1:Jan 75:1:11062
Enlightened Employers' Continuing Education Policies, John P. Klus, Lowell B. Jackson and C. Allen Wortley, EI3:July 75:419:11428
Environmental Impact Statements and Civil Engineering, Martin P. Wanielista, Waldron M. McLellon and Lawrence L. Smith, EI3:July 75:321: 11418
Ethics: Wisconsin Section Sparks Timely Discussion, Robert W. Brannan, CE:May 76:90
Kickbacks Versus Professional Ethics, Russel C. Jones, EI3:July 75:357:11420
Marketing's Role in Construction Firms, Richard M. Bessom, CO3:Sept 75:647:11592
Motivating Students Towards Professional Thinking, Joseph M. DeSalvo, EI1:Jan 75:47:11081
Motivation of Students Towards Professional Thinking, Milton Alpern, EI3:July 75:413:11435
NLRB Cancels Elections at Western Electric Facility for Separate Professional and Nonprofessional Units, CE:Jan 76:90
Professional Construction Management, Donald S. Barrie and Boyd C. Paulson, Jr., CO3:Sept 76:425: 12394
Proposed Professional Advancement Recognition (PAR) Program, C. Allen Wortley, EI1:Jan 76:117: 11861
Public Versus Client Interests - An Ethical Dilemma for the Engineer, Terry L. Turnock, EI1:Jan 75:61: 11083
Quantity Instead of Quality: A Sabotage of Engineering and Its Education by "Engineer Shortage" Propaganda?, Milton Alpern, EI4:Oct 76: 457:12501
Reforming Civil Engineering Education, Robert M. Sykes, CE:July 75:61
Towards Optimum Design Through Building Codes, Emilio Rosenblueth, ST3:Mar 76:591:11999
1975 ASCE Salary Survey, Schaefer J. Dixon, Chmn., EI2:Apr 76:225:12090

Professional Role

Liability of Consultants in Dam Investigations, Gardner M. Reynolds, EFRLD:Sept 75:157
Social Responsibility Within the Present Code of Ethics, George C. Govatos, EI3:July 75:351:11412

Professional Societies

Civil Engineering Esthetics—State-of-the-Art, Clayford T. Grimm and Wolfgang F.E. Preiser, ST8:Aug 76:1531:12322

Profilometers

Criteria Development to Evaluate Runway Roughness, Benjamin Frank McCullough and David Charles Steitle, TE2:May 75:345:11333

Profits

Formula for Markup for Profit, Marvin Gates and Amerigo Scarpa, TN: CO4:Dec 76:685:12590

Program Evaluation
Managing a Computer Program Development Project, A. Murray Lount, ST76:Aug 76:921

Program Evaluation Review Technique
Managing a Computer Program Development Project, A. Murray Lount, ST76:Aug 76:921

Programs
Social Science Emphasis in Engineering Education, Dan H. Pletta, EI4:Oct 75:509:11664
Why A Co-op Program—A Student's Point of View, Douglas J. Marshall, EI2:Apr 75:243:11264

Project Control
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., Preprint No.2643, Apr 76, 10pp.
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., CO4:Dec 76:587:12600
Interdisciplinary Approach to Central City Development, Albert A. Dorman, Preprint No.2749, Sept 76, 10pp.

Project Feasibility
Analysis of Dredging Projects, William B. Pearce, DIEE:Jan 76:139
Conference Review and Evaluation, David G. Ellingson, EFAN:Dec 74:287
Consultants Reviewing Plans of Other Consultants in Fairfax County, Va.; Landslides Greatly Reduced, Eugene E. Dallaire and C. S. Coleman, CE:Sept 76: 77
The Dallas/Fort Worth Airport Project, Raymond J. Hodge, EFAN:Dec 74:220
Determining Needs and Benefits of an Island Port Project Under U.S. Army Corps of Engineers Regulations, Jimmy B. Allen, WW76:Aug 76:316
Environmental Values and Water Quality Planning, Peter Richerson and Robert Johnston, HY2:Feb 75: 259:11136
Integrating Evaluation at the Project Scale, Alan M. Voorhees, UP1:Aug 76:35:12351
Interdisciplinary Approach to Central City Development, Albert A. Dorman, Preprint No.2749, Sept 76, 10pp.
Managing a Computer Program Development Project, A. Murray Lount, ST76:Aug 76:921
New York Offshore Airport Feasibility Study, Lawrence Lerner, Preprint No.2634, Apr 76, 25pp.
Optimal Development of Multipurpose Hydro Projects, Phillip R. Hoffman, PO1:July 74:43:10655
Quantifying Impact of Transportation Systems, William L. Smith, UP1:Mar 74:79:10416
Summary for Session IV —Case Study of Dallas/Fort Worth Airport, Jack L. Mahan, Jr., EFAN:Dec 74: 265
Systems Analysis in Evaluating the Economics of New and Maintenance Dredging Projects, William W.L. Lee, DIEE:Jan 76:364

Project Management
The Dallas/Fort Worth Airport Project, Raymond J. Hodge, Preprint No.2703, Apr 76, 10pp.
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., Preprint No.2643, Apr 76, 10pp.
Designing to Reduce Construction Costs, Boyd C. Paulson, Jr., CO4:Dec 76:587:12600
Developments in CPM, PERT, and Network Analysis, Calin Popescu and John D. Borcherding, CO4:Dec 75:769:11763
Leadership Constraint in Project Preparation, Phillip Z. Kirpich, EI4:Oct 76:417:12503
Management Issues in the U.S. Construction Industry, Janet Ann Koch Rossow and Fred Moavenzadeh, CO2:June 76:277:12184
Project Formulation: Economic and Financial Aspects, Gary D. Cobb, IR76:July 76:660
Project Formulation in Today's World — Legislative and Regulatory Aspects, Daniel A. Dreyfus, IR76: July 76:626
Project Formulation in Today's World — The New Dimensions of Legislative and Regulatory Aspects, Reginald E. Bailey, IR76:July 76:632
Project Formulation in Today's World — Some Rural Development Dimensions, Graham F. Donaldson, IR76:July 76:700
Staff Versus Administration Versus Board or the Planning Process Organized for Consensus Instead of Conflict, James Falick, David Burdick and Henry Winkelman, Preprint No.2701, Apr 76, 23pp.
VPM Scheduling for High-Rise Buildings, James J. O'Brien, CO4:Dec 75:895:11773

Project Planning
Analysis of Activity Networks under Uncertainty, Alfredo H-S. Ang, Jamal Abdelnour and Amal A. Chaker, EM4:Aug 75:373:11514

Projects
Project Communication and the Washington Metro System, William S. Alldredge, PROD:Aug 76:153

Properties
Horizontal Control in Kansas City by State Plane Coordinates, Don D. Hurlbert and J. Douglas McDonald, SU1:Dec 76:9:12598

Proportioning
Aesthetics is a Do-It-Yourself Project, Raymond C. Reese, ST76:Aug 76:33

Protective Coatings
Economics of Preventive Highway Maintenance, LaRue E. Delp, CE:Dec 76:43
Performance Requirements for Fireproofing Materials, Lawrence G. Seigel, EM3:June 74:489: 10598
Proven Organic Coatings for Long Term Protection, Abel Banov, CE:Dec 75:54
Proven Organic Coatings for Long Term Protection — Part II, Abel Banov, CE:Feb 76:64

Prototype Tests
Cumulative Deflection and Pavement Performance, William H. Highter and Milton E. Harr, TE3:Aug 75:537:11507

Psychological Factors
Is There Anything to 'Encounter Groups'?, Kneeland A. Godfrey, Jr., CE:Jan 76:67

Psychological Tests
Can We Engineer Vocational Assessment and Counseling for Everyone?, John L. Holland, CE: May 76:92

Psychology
New Building Measures Needed in Order to Design for People, Calvin W. Taylor, EFAN:Dec 74:47
Some Insights into the Behavioral Evaluation of Hospitals; Results of Three Studies, Wayne D. Veneklasen, Kevin E. Coray and Sue D. Pendell, EFAN:Dec 74:127

Psychometrics
Attitudinal Variables in Civil Engineering Design, Wilfred W. Recker and George C. Lee, EI1:Jan 76: 55:11862
Dry-Wet Tower Evaporation and Fog Psychometrics, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:21:11828

Publications
"ASCE Guide to Employment Conditions for Civil Engineers," by Committee on Employment Conditions (Book Review), Milton Alpern, CE:Feb 76:38
Building a Professionally Qualified Faculty, King S. Luk and Eugene H. Kopp, EI2:Apr 74:105:10466

Public Benefits
Multiple Criteria Theory and Airport Site Evaluation, John J. Jarvis, V. Ed Unger, Charles C. Schimpeler and Joseph C. Corradino, UP1:Aug 76:187:12353

Quantity Instead of Quality: A Sabotage of Engineering and Its Education by "Engineer Shortage" Propaganda?, Milton Alpern, EI4:Oct 76: 457:12501

Public Health

Chlorine Disinfection of Low Temperature Waters, Leroy C. Reid, Jr. and Dale A. Carlson, EE2:Apr 74:339:10443

Fate of Wastewater Bacteria and Viruses in Soil, Charles P. Gerba, Craig Wallis and Joseph L. Melnick, IR3:Sept 75:157:11572

Impact of Water Resources on Vector-Borne Diseases, Richard O. Hayes, WR2:Nov 76:177: 12526

Integrated Evaluation from a Regional Perspective, Jane Rodgers and George V. Wickstrom, UP1:Aug 76:125:12338

Maintaining Water Quality in Voyageurs National Park, William H. Anderl, Preprint No.2686, Apr 76, 14pp.

Monetary Values of Life and Health, Bob Buehler, HY1:Jan 75:29:11047

New Licensing Philosophy Concerning Soil Structure Interaction, Kanwar K. Kapur, STN75:Dec 75:II-238

Water Reclamation: Technology and Public Acceptance, Ralph Stone, EE3:June 76:581:12193

Water Resources Planning in America: 1776 to 1976 — Impact of Other Policies on Water Planning: Public Health, Leonard B. Dworsky and Bernard B. Berger, Preprint No.2754, Sept 76, 16pp.

Public Information Programs

Increased Productivity Through Effective Public Information, Michael J. Scanlon, PROD:Aug 76: 177

Public Affairs in the Civil Engineer: A Guideline for Accomplishment, Jewell T. Wood, EI3:July 76:339: 12262

Public Opinion

Communication Goals for Science and Engineering, S. H. Wittwer, EI2:Apr 76:183:12087

Public Affairs in the Civil Engineer: A Guideline for Accomplishment, Jewell T. Wood, EI3:July 76:339: 12262

Quantity Instead of Quality: A Sabotage of Engineering and Its Education by "Engineer Shortage" Propaganda?, Milton Alpern, EI4:Oct 76: 457:12501

When the Going Gets Tough, the Tough Get Going, Leland J. Walker, CE:Nov 76:65

Public Policy

"Earthquake Predictability and Public Policy," by the Panel on the Public Policy Implications of Earthquake Prediction (Book Review), Robert V. Whitman, CE:Jan 76:30

Issues and Problems in Urban Planning, Tung Au, EI3:July 75:305:11417

Public Services

Engineering of Public Systems, Gorman Gilbert and Jarir S. Dajani, EI1:Jan 75:15:11068

Public Transportation

Bus-Carpool FWY Lanes in San Francisco Area, Leonard Newman, TE4:Nov 76:625:12530

Bus/Carpool FWY Lanes in the San Francisco Area, Leonard Newman, Preprint No.2646, Apr 76, 26pp.

Distribution of Benefits of Public Transit Projects, Arun Chatterjee and Kumares C. Sinha, TE3:Aug 75:505:11497

Low-Energy Dual-Mode Transit, David M. Eggleston, Preprint No.2689, Apr 76, 12pp.

The Wrong Way is Sometimes the Right Way, Marshall Suloway, Preprint No.2697, Apr 76, 18pp.

Public Works

Art in Engineering - The Need for a New Criticism, David P. Billington, PP4:Oct 73:499:10102

Changes in Socioeconomic Considerations, Walter E. Lewis, UP1:Aug 76:29:12355

Changing Responsibilities of the Professional Engineer in Public Works, James L. Ogilvie, EI3: July 76:345:12275

Citizen Inputs to Public Works Projects, Desmond M. Connor, EI1:Jan 76:29:11856

Decisions About Wastewater Technology, 1800-1932, Joel A. Tarr and Francis Clay McMichael, Preprint No.2792, Sept 76, 30pp.

Engineers and Public Participation in Water Resources Development, Edward Silberman, Preprint No.2668, Apr 76, 22pp.

Engineer's Role in Environmental Issues, James L. Van Beveren, EI2:Apr 76:169:12085

Fifty Years of Construction Law, Robert A. Rubin, CO4:Dec 75:703:11758

George Waring: Giving Sanitation Status, CE:July 76: 81

Kingwood: A Non-Assisted Private Suburban Development, Daniel B. Stauffer, Preprint No.2656, Apr 76, 26pp.

Planning Criteria for Bikeways, Vincent R. Desimone, TE3:Aug 73:609:9928

Productivity Improvements Achieved in Navy Public Works Operations, Albert R. Marschall, PROD: Aug 76:135

Professional Engineers as Elected Local Officials, Kenneth R. Wright and Douglas T. Sovern, EI4: Oct 76:447:12504

Survival in the Legal Jungle, Frederick J. Richards, Jr., Preprint No.2761, Sept 76, 4pp.

The Three Ages of Philadelphia, Kneeland A. Godfrey, Jr., CE:July 76:44

The Trouble with Municipal Public Works, William E. Fendley, EI2:Apr 76:173:12077

Unemployment, Public Works, and the 1976 Presidential Election Campaign, Kneeland A. Godfrey, Jr., CE:Oct 76:82

Pull-Out Tests

In-Place Evaluation of Concrete, V. Mohan Malhotra, CO2:June 75:345:11354

Past and Future of Concrete Quality Control, Venkataswamy Ramakrishnan, CO2:June 76:263: 12187

Pull-Out Mechanism in Steel Fiber-Reinforced Concrete, Antoine E. Naaman and Surendra P. Shah, ST8:Aug 76:1537:12313

Pullout Resistance of Horizontal Anchors, Braja M. Das and Gerald R. Seeley, OE75:June 75:434

Pumped Storage

Analysis of Behavior of Edward Hyatt Power Plant, Fred H. Kulhawy and Richard F. Flanagan, GT3: Mar 75:243:11161

Diversion of Water through Northfield Mt. Pumped Storage Project, Charles W. Lockwood, WR1:Apr 76:49:12075

Jet-Forced Circulations in Water-Supply Reservoirs, Rodney J. Sobey and Stuart B. Savage, HY12:Dec 74:1809:11026

Keowee-Toxaway Power Project — OUTSTANDING, Roney A. Heinz, CE:June 75:46

Optimal Development of Multipurpose Hydro Projects, Phillip R. Hoffman, PO1:July 74:43:10655

Sediment Transport in a South Carolina Mountain Stream, Benjamin C. Dysart, III and Charles H. Langdon, III, IR76:July 76:56

Water and Power in the Northeast, Eugene O'Brien, Clarence N. Freeman and John H. Dixon, Preprint No.2688, Apr 76, 22pp.

Water and Power in the Northeast, Eugene O'Brien, Clarence N. Freeman and John H. Dixon, PO2: Nov 76:195:12574

Pumping

Bedload Sampling by Pumping, H. I. Langley, WW76:Aug 76:945

Design of Conduit System with Diverging Branches, Kwang-Ping Yang, Tung Liang and I-Pai Wu, HY1: Jan 75:167:11080

Determining Optimal Well Discharge, Otto J. Helweg, IR3:Sept 75:201:11566

Economic Pipe Sizing in Pumped Irrigation Systems, Roland P. Perold, IR4:Dec 74:425:10988

The Equivalent Radius of a Source in Numerical Models of Groundwater Flow, Iichiro Kono, NMG: June 76:II-1145
Hardinge Bridge Span Repair, Amitabha Ghosal, Jagadish C. Ganguly, Himangsu K. Banerjee and Mahesh P. Kapoor, CO4:Dec 74:631:11034

Pumping Plants
Application of Acoustic Velocity Flowmeters, Cortland C. Lanning and Robert W. Ehrhart, Preprint No.2716, Apr 76, 19pp.

Pumps
Ju'aymah Crude Oil Loading Terminal, R. D. Lee, Preprint No.2642, Apr 76, 22pp.
Planning the Tehachapi Crossing, Alfred R. Golze, HY1:Jan 75:1:11052
Shaft Failure of Large Axial Flow Pumps, Christopher A. Gardner and Howard T. Hill, PO2: Nov 76:209:12575

Puncture Resistance
Plastic-Reinforced Asphalt Seepage Barrier, Ronald K. Frobel and C. Brent Cluff, IR3:Sept 76:369: 12430

Purification
Chlorine Disinfection of Low Temperature Waters, Leroy C. Reid, Jr. and Dale A. Carlson, EE2:Apr 74:339:10443

Pyrolysis
Pyrolysis as Means of Sewages Sludge Disposal, Nancy E. Folks, R. Addis Lockwood, Bert A. Eichenberger, Frank R. Bowerman and Kenneth Y. Chen, EE4:Aug 75:607:11518

Quadratic Forms
Quadratic Loss and Scattering of Long Waves, Chiang C. Mei, Philip L-F. Liu and Arthur T. Ippen, WW3:Aug 74:217:10754

Qualifications
Specifications—Design Professionals' Forgotten Challenge, Edward R. Fisk, CO2:June 76:303:12171

Quality
Measuring Quality of Constructions with Man as the Measure, Ronald W. Petersen, EFAN:Dec 74:70
Productivity in Engineering Design, Kenneth F. Reinschmidt, PROD:Aug 76:21
The Quality System in Construction, Edward A. Abdun-Nur, EFAN:Dec 74:2
Summary for the Keynote Session I - The Quality System in Construction, Wayne D. Veneklasen, EFAN:Dec 74:246

Quality Assurance
Fifty-Year Development Construction of Steel Girder Bridges, Edward A. Burroughs, CO3:Sept 75:463:11549

Quality Control
Concepts of Project Planning and Control, Boyd C. Paulson, Jr., CO1:Mar 76:67:11984
Concrete Technology Aspects of CN Tower, John A. Bickley, CO1:Mar 75:201:11192
Contractor Quality Control, Joseph C. Dean, Robert I. Carr and Walter L. Meyer, CO3:Sept 76:535: 12422
Load Tests of Building Structures, Richard Bares and Neal FitzSimons, ST5:May 75:1111:11322
Measuring Quality of Constructions with Man as the Measure, Ronald W. Petersen, EFAN:Dec 74:70
The Quality System in Construction, Edward A. Abdun-Nur, EFAN:Dec 74:2
Recommended Standards for the Responsibility, Authority, and Behavior of the Inspector, Joseph Goldbloom, Chmn., CO2:June 75:359:11384
Reporter's Summary for Session VI—Summary Session, Cabell Gwathmey, EFAN:Dec 74:292
Statistical Aspects of Containment Tendon Surveillance, Mahendra P. Singh and Adolf Walser, PO1:July 75:23:11406
Statistical Quality Control at Kastraki Earth Dam, Panaghiotis C. Kotzias and Aris C. Stamatopoulos, GT9:Sept 75:837:11552
Structural Failures and How to Prevent Them, Dov Kaminetzky, CE:Aug 76:60
Summary for the Keynote Session I - The Quality System in Construction, Wayne D. Veneklasen, EFAN:Dec 74:246
Test Method for Seismic Qualification of Equipment, Michael de Estrada, PO1:July 74:97:10656
Towards Optimum Design Through Building Codes, Emilio Rosenblueth, ST3:Mar 76:591:11999
Vibroflotation Compaction of Granular Hydraulic Fills, Ralph E. Brown, Preprint No.2657, Apr 76, 30pp.
Visual Quality Controls in Highway Design, Bob L. Smith, TE3:Aug 75:479:11487
Working with the Health Client, James Falick, EFAN:Dec 74:116

Quantitative Analysis
Nonquantitative Methods in Water Resources Management, Rammohan K. Ragade, Keith W. Hipel and Tharakkal E. Unny, WR2:Nov 76:297: 12565

Quarrying
Hydraulic and Environmental Effects of Commercial In-Stream Dredging, Paul G. Mayer, DIEE:Jan 76: 947

Questionnaires
Passenger Evaluation of D/FW Airport, James E. Dunne, EFAN:Dec 74:207
Summary for Session IV —Case Study of Dallas/Fort Worth Airport, Jack L. Mahan, Jr., EFAN:Dec 74: 265
Survey of Current Research on Cold-Formed Structures, Shien T. Wang, Chmn., Preprint No.2807, Sept 76, 42pp.

Queueing Theory
Fifty Years of Construction Cost-Reducing Analyses, Robert L. Peurifoy, CO2:June 75:299:11371

Radar
Radar in Oceanography (Abstract), Duncan Ross, Paul G. Teleki and James Wiley, OE75:June 75: 1169

Radar Images
Radar in Oceanography (Abstract), Duncan Ross, Paul G. Teleki and James Wiley, OE75:June 75: 1169

Radar Interference
Plastic Tower Solves Radar Interference, Paul A. Gossen and Richard L. Tomasetti, CE:Dec 76:46

Radial Flow
Circular Jumps, Subhash C. Mehrotra, HY8:Aug 74: 1133:10758

Radioactive Decay
Radial Dispersion in Ground-Water Flow, Bruce W. Hunt, EM6:Dec 74:1117:10998
Radial Dispersion Through Adsorbing Media, Anand Prakash, HY3:Mar 76:379:11995
Transient Dispersion in Uniform Media Flow, Hung Tao Shen, HY6:June 76:707:12202

Radioactive Tracers
Radial Dispersion Through Adsorbing Media, Anand Prakash, HY3:Mar 76:379:11995

Radioactive Wastes
Development of Oregon's Hazardous Waste Program, Milan Synak, Patrick H. Wicks and Kenneth H. Spies, EE3:June 75:301:11355
Thermoelastic/Plastic Analysis in Rock Mechanics, William G. Pariseau, NMG:June 76:II-1168

Radiography
Bending Test for Compacted Clays, Arif Ajaz and Richard H.G. Parry, GT9:Sept 76:929:12404

Railroad Ballast
Contribution to Selection of Railroad Ballast, Paul N. Gaskin and Gerald P. Raymond, TE2:May 76:377:12134
Nonlinear Analysis of Rail Track and Support, Otto J. Svec and Gerald P. Raymond, NMG:June 76:I-540

Railroad Car Design
Use of Finite Element Analyses for Railcar Design, Michael J. Dennis, TE1:Feb 76:105:11921

Railroads
Automated Ground Transportation System Stations with Multiple Loading Positions, Dietrich R. Bergmann, TE2:May 75:383:11328
Contribution to Selection of Railroad Ballast, Paul N. Gaskin and Gerald P. Raymond, TE2:May 76:377:12134
The Evolution of Urban Transportation, CE:July 76:75
Practical Applications of the Mini Computer to Structure in Railway Maintenance Programs, Noam Eimer and Richard A. Teichman, Jr., ST76:Aug 76:675
Progress in Signaling for Track Guided Systems, Alastair D. McAulay, TE4:Nov 75:621:11695

Railroad Stations
Washington Metro Access Facilities, Mark M. Akins, CE:July 75:63

Railroad Ties
Nonlinear Analysis of Rail Track and Support, Otto J. Svec and Gerald P. Raymond, NMG:June 76:I-540
State-of-the-Art of Ballastless Track at-Grade, Walter L. Wheeler, TE1:Feb 76:131:11929

Railroad Tracks
Effect of Foundation Stiffness on Track Buckling, Yehia M. El-Aini, EM3:June 76:531:12216
Fifty-Year Highlights of Tunneling Equipment, David A. Day and Bradford P. Boisen, CO2:June 75:265:11393
Nonlinear Analysis of Rail Track and Support, Otto J. Svec and Gerald P. Raymond, NMG:June 76:I-540
State-of-the-Art of Ballastless Track at-Grade, Walter L. Wheeler, TE1:Feb 76:131:11929

Railroad Track Support Structures
Nonlinear Analysis of Rail Track and Support, Otto J. Svec and Gerald P. Raymond, NMG:June 76:I-540
State-of-the-Art of Ballastless Track at-Grade, Walter L. Wheeler, TE1:Feb 76:131:11929

Rails
Wheel Load Stress Concentrations on Crane Runway Girders, G. J.K. Asmis, ST76:Aug 76:1005

Rail Transportation
Intercity Systems, Jerry D. Ward, Preprint No.2769, Sept 76, 17pp.

Rainfall
Climatological Estimates of Evapotranspiration, Fred I. Morton, HY3:Mar 76:275:11974
Estimation of Rainfall Erosion Index, John K.H. Ateshian, IR3:Sept 74:293:10817
Estimation of Washload Produced on Certain Small Watersheds, Oswald Rendon-Herrero, HY7:July 74:835:10638
Floods Predicted From Rainfall Frequencies, Lee Robinson and Theodore T. Williams, HY10:Oct 72:1773:9294
The Guyon Model and the Experimental Subsurface Drainage Behaviour, Robert Lagace and Gilbert Sylvestre, IR76:July 76:229
Hydraulics of Slope Erosion by Overland Flow, Saburo Komura, HY10:Oct 76:1573:12489
Independent Comparison of Three Urban Runoff Models, David P. Heeps and Russell G. Mein, HY7:July 74:995:10685
Rainfall Temporal Patterns for Design Floods, David H. Pilgrim and Ian Cordery, HY1:Jan 75:81:11057
Stochastic Considerations in Thunderstorm Modeling, Ross B. Corotis, HY7:July 76:865:12231
Water Harvesting — Modern Application of an Ancient Method, Allen R. Dedrick, CE:Oct 76:86
Weather Modification for Use in High Plains, Richard A. Schleusener and J. R. Miller, Jr., IR3:Sept 74:339:10816

Rainfall-Runoff Relationships
Effects of Urbanization on Catchment Response, Rafael L. Bras and Frank E. Perkins, HY3:Mar 75:451:11196
Evaluating Rainfall-Runoff Model Performance, Ian D. Moore and Russell G. Mein, TN: HY9:Sept 76:1390:12368
Laboratory Experiments with Surface Runoff, Ivan Muzik, HY4:Apr 74:501:10463

Ramps
Washington, D.C. Mall Tunnel, Allan B. MacPherson and Philip E. Egilsrud, CE:Feb 75:64

Random Functions
Statistics of Random Wave Field, Keikhosrow Pajouhi and Chi C. Tung, WW4:Nov 75:435:11734

Random Processes
Approximation to First Passage Probability, Jann-Nan Yang, EM4:Aug 75:361:11502
Floating Plate under Wind Waves and Human Response, Masanobu Shinozuka, H. M. Hwang and E. Makitani, Preprint No.2650, Apr 76, 30pp.
Maximum Response Statistics for Yielding Oscillator, Nilesh C. Chokshi and Loren D. Lutes, EM6:Dec 76:983:12632
Peak Distribution of Random Wave-Current Force, Chi C. Tung, EM5:Oct 74:873:10843
Thermal Stress as a Narrow-Band Random Load, Robert A. Heller, EM5:Oct 76:787:12450

Random Vibration
Application of Optimal Control Theory to Civil Engineering Structures, Jann-Nan Yang, EM6:Dec 75:819:11812
Approximation to First Passage Probability, Jann-Nan Yang, EM4:Aug 75:361:11502
Method for Random Vibration of Hysteretic Systems, Yi-Kwei Wen, EM2:Apr 76:249:12073
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, Preprint No.2687, Apr 76, 28pp.
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, EM6:Dec 76:1041:12640
Structural System Parameter Estimation by Two-Stage Least Squares Method, Will Gersch, George T. Taoka and Robert Liu, EM5:Oct 76:883:12464
Time-Dependent Spectral Content of System Response, Ross B. Corotis and Erik H. Vanmarcke, EM5:Oct 75:623:11648

Random Vibration Analysis
Approximate Method for Nonlinear Random Vibration, Yi-Kwei Wen, EM4:Aug 75:389:11500

Rapid Transit Railways
Automated Ground Transportation System Stations with Multiple Loading Positions, Dietrich R. Bergmann, TE2:May 75:383:11328
Community Role in Modal Choice for Transit System Planning, Robert E. Paaswell and Janice Pafka-Gerbig, UP1:May 75:35:11305
Contribution to Selection of Railroad Ballast, Paul N. Gaskin and Gerald P. Raymond, TE2:May 76:377:12134

Integrated Evaluation from a Regional Perspective, Jane Rodgers and George V. Wickstrom, UP1:Aug 76:125:12338
Marine Alternatives for Rapid Transit in Hawaii, Theodore T. Lee, WW76:Aug 76:107
Planning and Implementation of the Chestnut Street Transitway, William J. Grabske and Richard K. Faris, Preprint No.2803, Sept 76, 23pp.
Progress in Signaling for Track Guided Systems, Alastair D. McAulay, TE4:Nov 75:621:11695
Project Communication and the Washington Metro System, William S. Alldredge, PROD:Aug 76:153
Public Acceptance of New Mass Transit System, Roger B. Trent and Cooper N. Redwine, UP1:Aug 76:225:12361
Rail Transit Operating Cost Guidelines, Edward E. Gilcrease, Jr., Walter Kudlick and Manuel Padron, TE2:May 75:365:11314
The Resurgence of Light Rail Transit, Martin Lenow, TE2:May 76:229:12131
State-of-the-Art of Ballastless Track at-Grade, Walter L. Wheeler, TE1:Feb 76:131:11929
Two Means of Alleviating Rush-Hour Crowding, Charles Libove, TE4:Nov 73:845:10144
Urban Tunnels—An Option for the Transit Crisis, Matt S. Walton and Richard J. Proctor, TE4:Nov 76:715:12532
Use of Finite Element Analyses for Railcar Design, Michael J. Dennis, TE1:Feb 76:105:11921
Vibration Measurements of Steel Transit Structures, Marshall L. Silver and Thomas Venema, ST9:Sept 75:1855:11557
Washington Metro: Our National Model, Robert S. O'Neil and Edmund A. Fairhead, CE:Sept 76:70

Rapid Transit Systems
Security, Safety and Related Aspects of Pedestrian Design for the New Eleventh Street Station of the Philadelphia Center City Commuter Rail Connection, Simon M. Langberg, BP75:Dec 75:516

Rates (Costs)
Interactive Simulation for Water System Dynamics, Neil S. Grigg and Maurice C. Bryson, UP1:May 75:77:11313

Rational Formula
Synthetic Design Hyetograph and Rational Runoff Coefficient, Jong-Song Chien and Simsek Sarikelle, IR3:Sept 76:307:12375
Volume of Storm Water Retention Basins, Chester J. Ordon, EE5:Oct 74:1165:10889

Rayleigh-Ritz Method
Buckling of Web Plates under Combined Loadings, Mohammed Z. Khan and Kenneth C. Johns, ST10:Oct 75:2079:11619
Determination of the Natural Modes of a Complex Elastic Structure in Terms of the Natural Modes of the Unconstrained Components, Jay S. Abramowitz, ST76:Aug 76:689

Raymond C. Reese Research Prize
1976 Raymond C. Reese Award Presented to Committee on Shear and Diagonal Tension (Joint with ACI), CE:Oct 76:98

Reactions (Mechanics)
Survey of Nozzle Piping Reaction Criteria for Mechanical Equipment, Richard A. Meyer, STN75:Dec 75:II-283

Reaction Time
Nitrifying Organism Concentration and Activity, Embar G. Srinath, Raymond C. Loehr and Tata B.S. Prakasam, EE2:Apr 76:449:12041

Ready Mixed Concrete
Deck Slab Repaired by Fibrous Concrete Overlay, Ernest K. Schrader and Anthony V. Munch, CO1:Mar 76:179:11976

Reaeration
Reaeration and Velocity Prediction for Small Streams, Edward G. Foree, EE5:Oct 76:937:12448

Recession Curves
Surface Runoff Hydrograph Equation, Vulli L. Gupta and Syed Afaq Moin, HY10:Oct 74:1353:10880

Recharge Wells
Control of Salt-Water Intrusion by Recharge Wells, Abdel-Aziz I. Kashef, IR4:Dec 76:445:12617
Wasterwater Reclamation and Recharge, Bay Park, N.Y., John Vecchioli, James A. Oliva, Stephen E. Ragone and Henry F.H. Ku, EE2:Apr 75:201:11232

Reclamation
Fate of Wastewater Bacteria and Viruses in Soil, Charles P. Gerba, Craig Wallis and Joseph L. Melnick, IR3:Sept 75:157:11572
New Method Dewaters Dredged Material, Cuts Lagooning Space, CE:Apr 75:90
Philadelphia—Civil Engineering News Roundup, CE:June 76:60
Practical Refuse Recycling, C. Edward Walter, EE1:Feb 76:139:11941
Reclamation and Western Development, Donald J. Duck, WW76:Aug 76:1114
Research Benefits in Water Resources Construction, William P. Simmons and William R. Groseclose, CO3:Sept 76:5277:12421
Water Reclamation: Technology and Public Acceptance, Ralph Stone, EE3:June 76:581:12193
2020 Hindsight; Another Fifty Years of Irrigation?, Daniel A. Dreyfus, IR2:June 75:87:11363

Recognition
Enlightened Employers' Continuing Education Policies, John P. Klus, Lowell B. Jackson and C. Allen Wortley, EI3:July 75:419:11428

Recovery
Rock Squeeze Study of Two Deep Excavations at Niagara Falls, C. F. Lee and Kwan Y. Lo, GT76:Aug 76:116

Recreation
Computer Location of Bikeways, William L. Smith and Jerry S. Murphy, BP75:Dec 75:66
A Tool for Improving Social Service Delivery Systems in Urban Areas, Allen E. Shinder and Martin L. Reiss, BP75:Dec 75:366
Whither Goest the Bikeway Boom?, Charles F. Floyd, BP75:Dec 75:471

Recreational Facilities
Dredged Material as a Natural Resource, Michael R. Walsh, Preprint No.2714, Apr 76, 19pp.
Flood Routing Through a Balancing Lake, Elsayed M. Elsawy and Toney Edgeley, WW76:Aug 76:1039
Frost Heaves — A Major Dilemma for Ice Arenas, Bruce M. Thorson and J. S. Braun, CE:Mar 75:62
The Recycling of a River, Kenneth R. Wright and William C. Taggart, CE:Nov 76:42
Use of Abandoned Gravel Pits as Spreading Grounds — Experience in Los Angeles County, Irving Sherman, IR76:July 76:461
Water Recreation and Benefit Estimation for Lake Livingston (Texas), Charles W. Warner, Jr., Pat B. Fowler, G. E. Munger, Jr. and Jerry R. Rogers, Preprint No.2682, Apr 76, 16pp.

Recreation Facilities
Kingwood: A Non-Assisted Private Suburban Development, Daniel B. Stauffer, Preprint No.2656, Apr 76, 26pp.
Maintaining Water Quality in Voyageurs National Park, William H. Anderl, Preprint No.2686, Apr 76, 14pp.
Modeling Water-Related Recreation Benefits, David W. York, Lawrence W. Gahan and Benjamin C. Dysart, III, TN: WR2:Nov 76:409:12577
Reclamation and Western Development, Donald J. Duck, WW76:Aug 76:1114

Shih-Kang Dam Multi-Purpose Development Project, Walter Chin Mih, WW76:Aug 76:1630
Social Aspects of Planning, Gene E. Willeke, Preprint No.2754, Sept 76, 22pp.

Recursive Functions
Recurrence Intervals of Abnormally High Tides by Superposition of Storm Surges over Astronomical Tides, Raymond K. DeYoung and James R. Pfafflin, OE75:June 75:79

Recursive Routines
Optimum Structural Design by Dynamic Programming, P. Packia Raj and S. Olani Durrant, ST8:Aug 76:1575:12329

Reflection
Evaporation Reduction with Reflective Covers, Keith R. Cooley and Lloyd E. Myers, IR3:Sept 73:353:9982

Reflective Materials
Nighttime Visibility Through Retro-Reflective Materials, Robert A. Isaksen, BP75:Dec 75:426

Refraction
Analytical Prediction of Shoreline Erosion, John S. Fisher, Leif F. Gulbrandsen and Victor M. Goldsmith, OE75:June 75:161
Arctic Refraction Study, Gerald W. Johnson, SU1:Dec 76:1:12602
Computation of Wave Heights Due to Refraction and Friction, Ove Skovgaard, Ivar G. Jonsson and Jens Aa. Bertelsen, WW1:Feb 75:15:11100
Ocean Wave Refraction Near Reykjavik, Iceland, Thorbjorn Karlsson and J. Eliasson, OE75:June 75:1232
Session 6: Soil Structure Interaction — Seismic Waves, Juan Enrique Luco, STN75:Dec 75:II-172

Refuse
Estimating Refuse Generation in Office Buildings, Glenn R. Harris, Stuart H. Mann and Craig R. Humphrey, TN: EE5:Oct 76:1111:12442
Hydraulic Collection and Disposal of Refuse, Jochen Kuhner and Peter M. Meier, EE4:Aug 76:769:12296
Minimum Cost in Residential Refuse Vehicle Routes, Jon C. Liebman, James W. Male and Magne Wathne, EE3:June 75:399:11368
Recycling Refuse Into Energy, Kneeland A. Godfrey, Jr., CE:Sept 76:86

Refuse Disposal
County Treats Shredfill Leachate, Otto Vydra and Alfred Grimm, CE:Dec 76:55
Decision Criteria in Solid Waste Collection, Ely Anthony Rosales Ouano and Richard J. Frankel, EE3:June 76:645:12173
Dredging and the Environmental Policy Act of 1969, James H. Bradley, DIEE:Jan 76:39
Dredging and the National Environmental Policy Act of1969, James H. Bradley, Preprint No.2734, Apr 76, 16pp.
Energy Recovery from Refuse—State-of-the- Art, John Payne, EE2:Apr 76:281:12027
Estimating Refuse Generation in Office Buildings, Glenn R. Harris, Stuart H. Mann and Craig R. Humphrey, TN: EE5:Oct 76:1111:12442
Evaluation of Environmental Impact of Landfills, Patrick Caffrey, Martin David and Robert K. Ham, EE1:Feb 75:55:11119
Ground-Water's Role in Water Quality Management, John O. Osgood, HY3:Mar 75:517:11159
Hydraulic Collection and Disposal of Refuse, Jochen Kuhner and Peter M. Meier, EE4:Aug 76:769:12296
Minimum Cost in Residential Refuse Vehicle Routes, Jon C. Liebman, James W. Male and Magne Wathne, EE3:June 75:399:11368
Recycling Refuse Into Energy, Kneeland A. Godfrey, Jr., CE:Sept 76:86
Solid Waste Management: Equity Trade-Off Models, Louis A. Fuertes, James F. Hudson and David H. Marks, UP2:Nov 74:155:10913

Regime Theory
Mississippi River Regime Analysis, Wallace H. Walters, Jr., WW76:Aug 76:730
Observations of Natural and Man-Made River Spurs, Thomas Blench, Victor J. Galay and E. K. Yaremko, WW76:Aug 76:1363
Regime Studies of the Lower Fraser, Alfred John Tamburi, WW76:Aug 76:1680

Regional Analysis
Cost Optimization of Rural Water Systems, Robert B. Robinson and T. Al Austin, HY8:Aug 76:1119:12301
Water Supply Economics, Robert M. Clark, UP1:Aug 76:213:12357

Regional Development
Economic Role of the Waterway in Western Europe, Maurice Marchal, WW3:Aug 76:337:12346

Regional Planning
Citizens Groups and Public Participation: Problems and Observations, Jonathan N. Brownell, EFEEC: Aug 75:388
City's Topographic Mapping System Saves Time, Money and is More Accurate, CE:Sept 76:98
Community Acceptance of Highway Corridor Development, Douglas Nunn, EI3:July 75:337:11414
Comprehensive Water Quality Management Planning, Kenneth A. Bartal and Leonardo V. Gutierrez, Jr., HY4:Apr 75:371:11263
Computer Location of Bikeways, William L. Smith and Jerry S. Murphy, BP75:Dec 75:66
County Leads in Steering Growth, Gloria S. McGregor, CE:July 75:47
County Planning for Suburban Growth Management, Arnold A. Goldstein, Preprint No.2817, Sept 76, 17pp.
Countywide Land Use Forecasts, Robert E. Heightchew, Jr., UP2:Nov 75:135:11682
Distributing Public Housing Resources, Bruce Yandle and George Biediger, UP2:Nov 75:147:11689
Environmental Impact Reports: Problems and Opportunities, Robert L. Jones, CE:May 75:71
Existing and Planned Energy Complexes, Kenneth R. Broome, EFEEC:Aug 75:24
Federal-State Relations in Water Quality Planning, Michael S. Alushin, HY3:Mar 75:523:11160
Ground-Water's Role in Water Quality Management, John O. Osgood, HY3:Mar 75:517:11159
Implementation of Interstate Water Quality Plan, Cecil H.J. Hull, HY3:Mar 75:495:11177
Integrated Grant Administration Program, Roland M. Lewis and Johannes W. Kurz, TE1:Feb 75:155:11110
Intergovernmental Guidance of Land Use and Growth, Bruce D. McDowell, UP1:Aug 76:15:12319
Land-Based Modeling System for Water Quality Management Studies, Walter M. Grayman, Richard M. Males, William E. Gates and A. W. Hadder, HY5:May 75:567:11327
Local and Regional Economic Impacts of Energy Complexes, Courtney Riordan, EFEEC:Aug 75:312
Local Land Use Workshops Help, Murray I. Mantell, CE:Oct 75:88
Method for Delineating Districts of Varying Shape, Geoffrey N. Berlin, TE4:Nov 76:805:12537
Planning Air Transport Network in Appalachia, Everett C. Carter and Edward K. Morlok, TE3:Aug 75:569:11499
Planning and Development of Bicycle Facilities: Implementation Planning, Walter H. Kraft and Carl M. Berkowitz, BP75:Dec 75:36
Planning for Pedestrianways, Niva S. Oghigian, BP75:Dec 75:103
Predicting Demand for Engineered Facilities, James P. Romualdi, EI3:July 75:365:11426

Processing Variable Forms for Travel Estimation, Jason C. Yu and Robert J. Popper, TE1:Feb 76:91: 11938
Project Formulation: Economic and Financial Aspects, Gary D. Cobb, IR76:July 76:660
Propensity of Statewide Multimodel Transportation, William D. Klink and Jason C. Yu, TE4:Nov 75: 639:11710
Regional and Local Siting Problems with Emphasis on Overall Environmental Impact — Introduction, Charles A. Dewey, Jr., EFEEC:Aug 75:46
Regional Impacts from Water Consumption and Heat Disposal in River Basins and Estuaries, Edwin T. Engman, EFEEC:Aug 75:131
Regional Transport Development and Economic Growth, Kenneth A. Brewer and Robert O. Richards, Jr., TE2:May 76:271:12126
The Role of Geotechnical Engineering in Land Use Planning, Ronald C. Hirschfeld, EFEEC:Aug 75:65
Sensitivity of Trip Distribution to Subarea Focusing, Nancy L. Nihan and Jacques Lassabliere, TE3:Aug 76:555:12317
Summary of Land-Use Policy Papers, Charles B. Notess, UP1:Aug 76:147:12330
Transportation Corridor Planning for Arizona Regional Airport, Wayne W. Linthacum, TE3:Aug 75:415:11478
Trouble in Paradise, Harry E. Schwarz and Maria R. Eigerman, HY5:May 75:603:11296
Two-Dimensional Logit Modal Split Model, Walter Cherwony and Jerome Lutin, TE3:Aug 76:525: 12299
Water—An Element of Land-Use and Urban Growth Policies, William R. Walker and William E. Cox, UP1:Aug 76:81:12339
2020 Hindsight; Another Fifty Years of Irrigation?, Daniel A. Dreyfus, IR2:June 75:87:11363

Registration

Building a Professionally Qualified Faculty, King S. Luk and Eugene H. Kopp, EI2:Apr 74:105:10466
Current Competence: Current Dilemma, Virginia Fairweather, CE:July 75:50
Enlightened Employers' Continuing Education Policies, John P. Klus, Lowell B. Jackson and C. Allen Wortley, EI3:July 75:419:11428
Professional Development—An Educator's Viewpoint, Alfred C. Ingersoll, EI4:Oct 75:471: 11660
Trends in P.E. License Renewal Requirements, Robert D. Reckert, EI4:Oct 75:449:11667

Regression Analysis

Cost and Pricing Relationships in Water Supply, Robert M. Clark, EE2:Apr 76:361:12025
Laboratory Standard Penetration Tests on Fine Sands, William F. Marcuson, III and Wayne A. Bieganousky, Preprint No.2752, Sept 76, 30pp.

Regulation

Alberta's Viewpoint on Risk, John W. Campbell, EFRLD:Sept 75:147
Competition in the Transportation Industry, Dayle M. Clark and James J. Schwarzwalder, TE3:Aug 76:489:12290
Liability Considerations in State Dam Permit and Inspection Programs (A Look at Ohio's Program), Roy Winkle, EFRLD:Sept 75:113
Mobility of Trace Metals during Open Water Disposal of Dredged Material and Following Resedimentation, Kenneth Y. Chen, James C.S. Lu and Amancio Z. Sycip, DIEE:Jan 76:435
One Owners Dam Safety Program and Its Application Under Government Regulations, Thomas A. Kelly, EFRLD:Sept 75:105
An Outline of the Enforcement of Safety of Dams Statutes in California, Porter A. Towner, EFRLD: Sept 75:87
Project Formulation in Today's World — Legislative and Regulatory Aspects, Daniel A. Dreyfus, IR76: July 76:626
Project Formulation in Today's World — The New Dimensions of Legislative and Regulatory Aspects, Reginald E. Bailey, IR76:July 76:632
Public Participation in Great Lakes Water Levels Regulation: Further Findings from the Public Hearing Held by the I.J.C. in 1973, A. P. Grima and C. Dufournaud, IR76:July 76:418
Recent Legislation Impacting on Dredging Projects, William L. Black, Preprint No.2727, Apr 76, 23pp.
Review and Responsibility of State Dam Safety Programs, Bruce A. Tschantz, EFRLD:Sept 75:51

Regulations

Air Quality Management through Land-Use Measures, Ronald A. Venezia, UP1:Aug 76:95: 12350
Conowingo-Peach Bottom Energy Complex: Financial, Legal and Public Relations Aspects, W. H. Johnson, EFEEC:Aug 75:292
Desirable Modifications in Regulatory and Licensing Activities, Gerald Charnoff, EFEEC:Aug 75:356
Determining Needs and Benefits of an Island Port Project Under U.S. Army Corps of Engineers Regulations, Jimmy B. Allen, WW76:Aug 76:316
Development of United States Atomic Energy Commission Regulatory Standards, Robert Minogue, SDNPF:Dec 73:III-110
Dredging and the Environmental Policy Act of 1969, James H. Bradley, DIEE:Jan 76:39
Dredging and the National Environmental Policy Act of1969, James H. Bradley, Preprint No.2734, Apr 76, 16pp.
Economic Impact of Dredging Regulations, Frank C. Boerger and Michael H. Cheney, DIEE:Jan 76:408
The Effect of Regulations on Productivity as Viewed by the Engineer, Billy T. Sumner, PROD:Aug 76: 219
The Effect of Regulations on Productivity, J. C. Turner, PROD:Aug 76:257
Flood Proofing Regulations for Building Codes, Armando C. Lardieri, HY9:Sept 75:1155:11576
Legislative Impacts on Dredging — General Regulatory Functions, Charles W. Hollis, DIEE:Jan 76:1
National Environmental Policies and the Effect on Productivity Through Regulation, Norman E. Hill, PROD:Aug 76:277
National Program of Inspection of Dams — Existing Practices and Capabilities, Charles F. Corns, EFRLD:Sept 75:17
Nebraska Flood-Plain Management Program—Part II, James R. Cook, HY7:July 75:983:11438
Preoperational and Operational Hydrothermal Field Data Acquisition and Analysis, Mark Markofsky, HY12:Dec 76:1711:12597
Regulations—Boon or Bane?, CE:Dec 76:73
Regulation/Strangulation — Contractor's Viewpoint, J. A. Judge, PROD:Aug 76:239
Report of the Roundtable on Legislation, Marie E. Birnbaum, BP75:Dec 75:590
Session 6: Soil Structure Interaction — Design Time-History, P. K. Agrawal, STN75:Dec 75:II-181
State Government Views of Licensing Energy Complexes, Sheldon A. Schwartz, EFEEC:Aug 75: 345
Statistical Design Basis for Submerged Diffuser, Thomas E. Pease and Michael J. Skelly, PO1:July 75:11:11408
Waters of the United States, William L. Black, DIEE: Jan 76:10

Rehabilitation

Landmark Erie Canal Structure Rehabilitated, Lawrence H. Lehman, Bertram Shapiro and Robert J. Trapani, CE:Oct 76:62
Seismic Rehabilitation of Buildings With Special Importance, Daniel Shapiro, Preprint No.2787, Sept 76, 17pp.
Ventura City Hall Restoration, James Warner, CO1: Mar 76:119:11970

Reinforced Earth

Bearing Capacity Analysis of Reinforced Earth Slabs, Jean Binquet and Kenneth L. Lee, GT12:Dec 75: 1257:11793

Bearing Capacity Tests on Reinforced Earth Slabs, Jean Binquet and Kenneth L. Lee, GT12:Dec 75: 1241:11792
Integrated Study of Reinforced Earth—II: Behavior and Design, Chih-Kang Shen, Karl M. Romstad and Leonard R. Herrmann, GT6:June 76:577:12210
Reinforced Earth: A New Alternative for Earth Retention Structures, David S. Gedney and David P. McKittrick, CE:Oct 75:58
Soil Strength Improvement Through Reinforcement, Kenneth L. Lee, Preprint No.2806, Sept 76, 28pp.

Reinforced Plastics
Experimental Bridge Girder of Reinforced Plastic, Fred C. McCormick, TE1:Feb 75:47:11104
Structural Economy of Certain Scalloped Shells, Ravindra K. Vyas and Sang Ho Do, ST76:Aug 76: 205

Reinforcement
Analysis of Reinforced Fibrous Concrete Beams, Charles H. Henager and Terrence J. Doherty, ST1: Jan 76:177:11847
Bearing Capacity Analysis of Reinforced Earth Slabs, Jean Binquet and Kenneth L. Lee, GT12:Dec 75: 1257:11793
Bearing Capacity Tests on Reinforced Earth Slabs, Jean Binquet and Kenneth L. Lee, GT12:Dec 75: 1241:11792
Bearing Strength of Reinforced Concrete Blocks, Sanat Kumar Niyogi, ST5:May 75:1125:11325
Deck Slab Repaired by Fibrous Concrete Overlay, Ernest K. Schrader and Anthony V. Munch, CO1: Mar 76:179:11976
Ferrocement—Behavior in Tension and Compression, Colin D. Johnston and Samir G. Mattar, ST5:May 76:875:12104
Ferrocement Load-Bearing Wall Elements, Prakash Desayi and Arun D. Joshi, ST9:Sept 76:1903:12420
Fifty-Year Developments in High Strength Concrete, Colin D. Johnston, CO4:Dec 75:801:11757
Interface Shear Transfer and Dowel Action in Cracked Reinforced Concrete Subject to Cyclic Shear, Rafael Jimenez, Philip Perdikaris, Peter Gergely and Richard N. White, ST76:Aug 76:457
Minimum Cost Selection of One-Way Slab Thickness, Russell H. Brown, ST12:Dec 75:2585: 11785
Minimum Reinforcement of Nonuniform Plates, Robert E. Melchers, EM6:Dec 76:943:12618
Model Study of Tunnel Prereinforcement, Gregory E. Korbin and Tor L. Brekke, GT9:Sept 76:895:12415
Optimally Reinforced Axisymmetric Plates, Robert E. Melchers, EM2:Apr 75:143:11258
Optimum Steel Distribution in Corner Slabs, Ganpat S. Pandit and Subodh C. Sharma, TN: ST12:Dec 76:2360:12593
Plastic-Reinforced Asphalt Seepage Barrier, Ronald K. Frobel and C. Brent Cluff, IR3:Sept 76:369: 12430
Probabilistic Analysis of Fiber-Reinforced Concrete, Antoine E. Naaman, Fred Moavenzadeh and Frederick J. McGarry, EM2:Apr 74:397:10491
Recent Results in French Research on Reinforced Earth, Francois Schlosser and Nguyen-Thanh-Long, CO3:Sept 74:223:10800
Reinforced Concrete Materials — A Remarkable Heritage, Clyde E. Kesler, Preprint No.2755, Sept 76, 21pp.
Reinforced Earth Bridges Highway Sinkhole, Ronald S. Steiner and Edward J. Trojan, CE:July 75:54
Seismic Design of Reinforced Earth Walls, Gregory N. Richardson and Kenneth L. Lee, GT2:Feb 75: 167:11143
Shear Failure Due to Web Crushing in Prestressed Concrete I-Beams, Larp Chitnuyanondh, T. Ivan Campbell, Barrington deV. Batchelor and Paul Csagoly, T76:Aug 76:476
Soil Strength Improvement Through Reinforcement, Kenneth L. Lee, Preprint No.2806, Sept 76, 28pp.
Ultimate Strength of Continuous Composite Beams, Sumio Hamada and Jack Longworth, ST7:July 76: 1463:12267
Ultimate Torque of Reinforced Concrete Beams, David J. Victor, Narayanan Lakshmanan and Narayanan Rajagopalan, ST7:July 76:1337:12249

Reinforcing Steels
Experience with Computer-Aided Drafting System, Geoffrey M.J. Williams, ST4:Apr 75:649:11224

Relative Density
Underwater Placement of Sand Fill at Port of Portland Terminal #6, Loren R. Anderson and John Ramage, Preprint No.2718, Apr 76, 20pp.

Reliability
Analytical Study of Freeway Reliability, Abishai Polus and Joseph L. Shofer, TE4:Nov 76:857:12570
Designing More Reliable Waste Treatment Plants, Michael J. Partridge and Charles H. Sutfin, CE:Jan 75:68
Diffusion of Probability Mass and First Passage Probability, Jann-Nan Yang, EM5:Oct 75:639: 11654
Earth Slope Reliability by a Level-Crossing Method, J. Morla Catalan and C. Allin Cornell, GT6:June 76:591:12214
Empirical Effective Width Formula, Niels C. Lind, Mayasandra K. Ravindra and Gerald Schorn, ST9: Sept 76:1741:12426
Failure Modes for Offshore Platforms: Part II — Fatigue, Peter W. Marshall, ST76:Aug 76:309
Illustrations of Reliability-Based Design, Mayasandra K. Ravindra, Niels C. Lind and Wilfred W.C. Siu, ST9:Sept 74:1789:10779
Inductive Approaches to Structural Safety, Daniele Veneziano, EI1:Jan 76:81:11871
Literature Surveys of Cold-Formed Structures, Ken P. Chong, Chmn., Preprint No.2807, Sept 76, 59pp.
Offshore Platform Reliability — A Parameter Study, Bernhard Stahl and K. A. Blenkarn, ST76:Aug 76: 419
Opening Remarks, Joseph J. Ellam, EFRLD:Sept 75: 1
Optimum Design for Infrequent Disturbances, Emilio Rosenblueth, ST9:Sept 76:1807:12433
Practical Approach to Code Calibration, Wilfred W.C. Siu, Sree R. Parimi and Niels C. Lind, ST7: July 75:1469:11404
Rating and Reliability of Railway Bridges, William G. Byers, ST76:Aug 76:153
Reliability of Prismatic Bars in Tension, Emilio Rosenblueth and Alfredo Carcaga, TN: EM3:June 76:563:12168
Reliability Theory of Deteriorating Structures, Hiroyuki Kameda and Takeshi Koike, ST1:Jan 75: 295:11079
A Structural Design Decision Methodology for Nuclear Power Plants, Samad Zendehrouh and Masanobu Shinozuka, ST76:Aug 76:517
Sytems Approach to the Mechanics of Array Cables, Rolf G. Kasper, OE75:June 75:610

Relief Valves
Removal of Air from Water Lines by Hydraulic Means, Paul E. Wisner, Farrukh N. Mohsen and Nicholas Kouwen, HY2:Feb 75:243:11142

Religions
William D. Henderson: Man, Engineer, Priest Minister, Nhora I. Cortes-Comerer, CE:Mar 76:63

Relocation
Modeling Social Impacts of Urban Highways, David C. Colony and Abul B. Shah Alam, TE2:May 76: 395:12148

Remote Sensing
Civil Engineering Applications of Remote Sensing, David J. Barr and Wesley P. James, TE2:May 75: 279:11300
Photographic Remote Sensing of Bolinas Lagoon, California, Douglas M. Pirie and Michael J. Murphy, Preprint No.2647, Apr 76, 17pp.

Remote Sensing of Mississippi River Characteristics, James F. Ruff, Morris M. Skinner, Brien R. Winkley, Daryl B. Simons and Dennis E. Dorratcague, WW2:May 76:189:12150
Remote Sensing of Turbidity Plumes in Lake Ontario, Edward J. Pluhowski, TE3:Aug 76:475:12306
Satellite Observations of Water Quality, Graham P. Harris, Robert P. Bukata and J. Edward Bruton, TE3:Aug 76:537:12300
Satellites Helping Solve Some Down-to-Earth Civil Engineering Problems, CE:Aug 75:49

Removal
A Promising New Process for Removing Heavy Metals from Wastewater, CE:Oct 76:78

Renovating
Renovation and Recycling — New Life for Old Buildings, Virginia Fairweather, CE:Oct 75:69

Repair Costs
Disaster-Caused Increases in Construction Costs, Thomas N. Yancey, Jr., James L. Douglas and D. Earl Jones, Jr., CE:Sept 76:94
Disaster Caused Increases in Unit Repair Cost, Thomas N. Yancey, Jr., L. Douglas James, D. Earl Jones, Jr. and Jeanne Goedert, WR2:Nov 76:265:12564
Renovation and Recycling — New Life for Old Buildings, Virginia Fairweather, CE:Oct 75:69

Repairing
Case History — Problems in Obtaining Repairs to Barber Dam, A. Kenneth Dunn, EFRLD:Sept 75:93
Epoxy-Repaired Bolted Timber Connections, R. Richard Avent, Leroy Z. Emkin, Robert H. Howard and Charles L. Chapman, ST4:Apr 76:821:12061
Renovation and Recycling — New Life for Old Buildings, Virginia Fairweather, CE:Oct 75:69

Repeated Loading
Effects of Straining on Shear Modulus of Clays, Donald G. Anderson and Frank E. Richart, Jr., GT9:Sept 76:975:12428
Plasticity and Some of Its Corollaries in Soil Mechanics. Collapse and Continuing Deformation Under Load Repetition, Olgierd C. Zienkiewicz, NMG:June 76:III-1275
Steel Orthotropic Plates under Alternate Loads, Giulio Ceradini, Carlo Gavarini and Mario P. Petrangeli, ST10:Oct 75:2015:11618
Stress-Strain Behavior of Sand, Vijay K. Khosla and Tien H. Wu, GT4:Apr 76:303:12079

Reports
Composite Steel-Concrete Construction, Ivan M. Viest, Chmn., ST5:May 74:1085:10561
Concepts of Project Planning and Control, Boyd C. Paulson, Jr., CO1:Mar 76:67:11984
Design of Steel Transmission Pole Structures, Gene M. Wilhoite, Chmn., ST12:Dec 74:2449:11009
Folded-Plate Structures, Jerome S.B. Iffland, Preprint No.2807, Sept 76, 66pp.
Improving Your Writing, Eugene E. Dallaire, CE:Jan 75:60
Improving Your Writing — Part II, Eugene E. Dallaire, CE:Apr 75:80
Recommended Standards for the Responsibility, Authority, and Behavior of the Inspector, Joseph Goldbloom, Chmn., CO2:June 75:359:11384
State-of-the-Art Report on Ultimate Strength of I-Beam Bridge Systems, Conrad P. Heins, Chmn., ST5:May 75:1085:11323
1975 ASCE Salary Survey, Schaefer J. Dixon, Chmn., EI2:Apr 76:225:12090

Requirements
Image Error and Photogrammetric Requirements, G. Warren Marks, SU1:Dec 76:39:12607

Research
ASCE Urban Water Resources Research Program, Murray B. McPherson and George F. Mangan, Jr., HY7:July 75:847:11445
Current and Proposed Construction Research Studies, John D. Borcherding and Brennon P. Hatley, CO3:Sept 76:547:12423
A Decade of Research in Surveying and Mapping, Morris M. Thompson, SU1:Oct 75:1:11626
Education, Research, and Productivity in Construction, Boyd C. Paulson, Jr., PROD:Aug 76:187
Engineering Challenges of Dredged Material Disposal, Robert M. Meccia, William C. Allanach and Fletcher H. Griffis, WW1:Feb 75:1:11096
Finite Element Analysis of Grout Propagation, Manfred Wallner and Walter Wittke, NMG:June 76:II-1119
Goals for Education and Research in Construction, Boyd C. Paulson, Jr., CO3:Sept 76:479:12393
Irrigation Research to Practice in Grand Valley, Gaylord V. Skogerboe, Wynn R. Walker and Robert G. Evans, IR76:July 76:19
Land Surveying Research: 1965-1975, John A. Dearinger, SU1:Oct 75:51:11649
Multiple Linearization Flow Routing Model, Thomas N. Keefer and Raul S. McQuivey, HY7:July 74:1031:10668
Planning Air Transport Network in Appalachia, Everett C. Carter and Edward K. Morlok, TE3:Aug 75:569:11499
Planning Water Resources Research Programs, John S. Gladwell, WR1:Apr 76:3:12072
Research Activity and Needs in Engineering Surveying, Gunther Greulich, SU1:Oct 75:65:11610
Research Benefits in Water Resources Construction, William P. Simmons and William R. Groseclose, CO3:Sept 76:5277:12421
Research Needs Relative to Environmental Data, Byron H. Willis, HY11:Nov 75:1423:11700
River-Ice Problems: A State-of-the-Art Survey and Assessment of Research Needs, John F. Kennedy, Cochmn. and George D. Ashton, Cochmn., HY1:Jan 74:1:10281
Skin Friction in Unsteady Laminar Pipe Flow, Mario F. Letelier S. and Hans J. Leutheusser, HY1:Jan 76:41:11867
Survey of Current Research on Cold-Formed Structures, Shien T. Wang, Chmn., Preprint No.2807, Sept 76, 42pp.
The Translation of Research Results Into Practice, George Bugliarello, IR76:July 76:1
The University's Role in Research Implementation, Ernest T. Smerdon, IR76:July 76:11
Water Management Through Irrigation and Drainage: Progress, Problems, and Opportunities, Jan van Schilfgaarde, Chmn., IR2:June 74:153:10619

Research and Development
The Aerospace Industry and the Civil Engineer, W. James King and Donald McDonald, Preprint No.2808, Sept 76, 20pp.
A Construction Industry R&D Incentives Program, Donald C. Taylor, Joseph C. Kellogg and Michael C. Wilkinson, EI3:July 76:369:12271
Planning Water Resources Research Programs, John S. Gladwell, WR1:Apr 76:3:12072
The Translation of Research Results Into Practice, George Bugliarello, IR76:July 76:1
The University's Role in Research Implementation, Ernest T. Smerdon, IR76:July 76:11

Research Dissemination
Irrigation Research to Practice in Grand Valley, Gaylord V. Skogerboe, Wynn R. Walker and Robert G. Evans, IR76:July 76:19
The University's Role in Research Implementation, Ernest T. Smerdon, IR76:July 76:11

Research Facilities
Evaluating the Constructed Environment; A Comparison of Two Biomedical Research Laboratories, Robert Gutman and Barbara Westergaard, EFAN:Dec 74:14

Reservoir Design
Water Yield Model Using SCS Curve Numbers, Jimmy R. Williams and William V. LaSeur, HY9: Sept 76:1241:12377

Reservoir Operation
Models for Scheduling Releases from Multireservoir Systems: A State-of-the-Art Review, Oskar T. Sigvaldson, IR76:July 76:331
Screening Model for Conjunctive-Use Water Systems, Abdullatif S. Hamdan and Dale D. Meredith, HY10:Oct 75:1343:11611
Sequential Deterministic Optimization in Reservoir Operation, Thomas E. Croley, II, HY3:Mar 74:443: 10426

Reservoir Performance
Optimal Operation of Multiple Resevoir System, Dale D. Meredith, HY2:Feb 75:299:11128

Reservoirs
Aqueduct Optimization with Intermediate Storage, Jayant Sathaye and Warren A. Hall, IR2:June 76: 249:12180
Characterization and Models of the Watershed Storage Process, A. R. Rao, Pen-Chih Tao and C. Rukvichai, Preprint No.2663, Apr 76, 27pp.
Computer Modeling of Erodible Flood Channels and Deltas, Howard H. Chang and Joseph C. Hill, HY10:Oct 76:1461:12485
The Floating Cover: Best Way to Cover a Finished-Water Reservoir?, Eugene E. Dallaire, CE:June 75: 75
Flood Routing Through a Balancing Lake, Elsayed M. Elsawy and Toney Edgeley, WW76:Aug 76: 1039
A Geomorphic Study of Pool 25 in the Upper Mississippi River, Michael A. Stevens, Stanley A. Schumm and Daryl B. Simons, WW76:Aug 76:1655
Integrated River System Operation in a Major Flood, Alfred J. Cooper and Clifford A. Roberts, PO1:Jan 76:63:11825
Jet Discharge into a Stratified Reservoir, Rufus B. Darden, Jorg Imberger and Hugo B. Fischer, HY9: Sept 75:1211:11583
Jet-Forced Circulations in Water-Supply Reservoirs, Rodney J. Sobey and Stuart B. Savage, HY12:Dec 74:1809:11026
Landslide Generated Water Wave Model, Donald C. Raney and H. Lee Butler, HY9:Sept 76:1269:12425
Meeting the Challenge of Constructing a Reservoir Bypass Pipeline, Duane D. Buchholz and Roger T. Menlove, Preprint No.2644, Apr 76, 19pp.
A Numerical Model of the Time-Dependent, Three-Dimensional Structure of Circulation in Large Lakes, Ralph Ta-shun Cheng, Preprint No.2692, Apr 76, 27pp.
Optimal Operation of Multiple Resevoir System, Dale D. Meredith, HY2:Feb 75:299:11128
Repair of Earthquake Damaged Underground Reservoir, Daniel J. Smith, Jr., CO3:Sept 74:449: 10825
Reservoir Project Environmental Study, Merwin D. Dougal and Kenneth L. Dueker, HY9:Sept 75:1257: 11578
Role of Eddy Diffusivity in Thermocline Formation, Brian Henderson-Sellers, EE3:June 76:517:12174
Seismic Response of Reservoir-Dam Systems, E. Benjamin Wylie, HY3:Mar 75:403:11184
Shih-Kang Dam Multi-Purpose Development Project, Walter Chin Mih, WW76:Aug 76:1630
State-of-the-Art of Geothermal Reservoir Engineering, Patrick K. Takahashi, Bill H. Chen, Ken I. Mashima and Arthur S. Seki, PO1:July 75: 111:11455
Tentative Program for the Solution of the Sula Valley Flood Problem, Ricardo Alduvin A., WW76:Aug 76:892
Tough Pollution Laws Spur Use of Impermeable Liners, Eugene E. Dallaire, CE:May 75:63
Two Centuries of Water Planning: A Review of the Development of Methodology, Ray K. Linsley, Preprint No.2754, Sept 76, 10pp.
Upstream Flood Lowering in Reservoirs, Bob Buehler, HY2:Feb 76:151:11911
Use of Decision Theory in Reservoir Operation, Samuel O. Russell, HY6:June 74:809:10586
Wind Control of Algae Growth in Eutrophic Lakes, Heinz Stefan, Timothy Skoglund and Robert O. Megard, EE6:Dec 76:1201:12619

Reservoir Storage
Agricultural Benefit Assessment from Flood Control, Krishan P. Singh, IR76:July 76:264
Long-Term Operation of Storage Hydro Projects, W. F. Caselton and Samuel O. Russell, WR1:Apr 76: 163:12089
Models for Scheduling Releases from Multireservoir Systems: A State-of-the-Art Review, Oskar T. Sigvaldson, IR76:July 76:331

Residual Stress
Behavior of Fabricated Tubular Columns Under Biaxial Bending, Wai F. Chen and D. A. Ross, Preprint No.2659, Apr 76, 21pp.
Bending Strength of Rectangular Hallow Sections, Ray R. Ayers, James M. Nash and William J. Graff, ST76:Aug 76:439
Inelastic Buckling of Rings with Residual Stresses, Subhash C. Anand and Alvin R. Griffith, EM5:Oct 73:927:10063
Initial Stresses in Natural Slope Analysis, Robin N. Chowdhury, GT76:Aug 76:404

Resins
Effect of Catalyst in Soil-Resin Stabilization, Dalim K. Majumdar, GT6:June 75:531:11385

Resistance
Dynamic Behavior of Partially Embedded Pile, Muhammed A. Satter, GT7:July 76.775:12265

Resistance Coefficients
Analysis of Bed Profiles in Sand Bed Canals, Khalid Mahmood and Hassan Ahmadi-Karvigh, WW76: Aug 76:564

Resolutions
Resolutions Adopted at the Fourth National Seminar on the Planning, Design and Implementation of Bicycle and Pedestrian Facilities, Elizabeth A. Drake, BP75:Dec 75:591

Resonance
Effects of Entrance Loss on Harbor Oscillations, Umit Unluata and Chiang C. Mei, WW2:May 75: 161:11287
Parametric Resonance of Suspension Roofs in Wind, Haruo Kunieda, EM1:Feb 76:59:11899
Resonance Phenomena Due to Turbulent Boundary Layer Excitation of Elastic Surfaces, Robert L. Ash and R. Balasubramanian, Preprint No.2726, Apr 76, 28pp.
Some Effects of Dynamic Soil Properties on Soil-Structure Interaction, Frank E. Richart, Jr., GT12: Dec 75:1193:11764

Resonant Frequency
Dynamic Response of Tropical Marine Limestone, Zen Yang and Allen W. Hatheway, GT2:Feb 76: 123:11893

Resource Allocation
Construction Cash Flow Management System, Kenneth F. Reinschmidt and Walter E. Frank, CO4:Dec 76:615:12610
Highway User Benefit/Cost Analysis in California, Heinz Heckeroth and Charles E. Paulsen, TE4:Nov 76:605:12524
Water Management Through Irrigation and Drainage: Progress, Problems, and Opportunities, Jan van Schilfgaarde, Chmn., IR2:June 74:153:10619

Resources
Conceptual RMC/Time Synthesis, Marvin Gates and Amerigo Scarpa, CO2:June 76:307:12181

Respiration
Atmospheric Reaeration in a River Using Productivity Analysis, George M. Hornberger and Mahlon G. Kelly, EE5:Oct 75:729:11644
Oxygen Depletion Model for Cayuga Lake, J. Denis Newbold and James A. Liggett, EE1:Feb 74:41:10346

Responses
A Comparative Study of Structural Response to Explosion-Induced Ground Motions, Neal FitzSimons, Chmn., SREGM:75, 138pp.
Cross-Flow Response of Piles Due to Ocean Waves, Rimas Vaicaitis, EM1:Feb 76:121:11897
Earthquake Response of Offshore Structures, Owen M. Kirkley and Joseph P. Murtha, OE75:June 75:865
The Engineer's Response to Nonengineering Criticism of His Professional Work, John E. Spitko, Jr., EI1:Jan 75:1:11062
Evaluation of an Existing Building Complex for Earthquake Response, Sigmund A. Freeman, ST76:Aug 76:781
Generation of Seismic Floor Spectra, Mahendra P. Singh, EM5:Oct 75:593:11651
Kink Formation and Rotational Response of Single and Multistrand Electromechanical Cables, Francis C. Liu, OE75:June 75:546
Maximum Response Statistics for Yielding Oscillator, Nilesh C. Chokshi and Loren D. Lutes, EM6:Dec 76:983:12632
Measurements and Evaluation of Building Response to Ground Motion at Various Stages of Construction, Kenneth K. Honda, ST76:Aug 76:403
Models of Geological Materials in Ground Shock, Ivan S. Sandler and Melvin L. Baron, NMG:June 76:I-219
Nonlinear Seismic Response of a Coupled Wall System, Stephen A. Mahin and Vitelmo V. Bertero, ST9:Sept 76:1759:12407
Predicting Wind-Induced Response in Hurricane Zones, Bjarni V. Tryggvason, David Surry and Alan G. Davenport, ST12:Dec 76:2333:12630
Probabilistic Analysis of Elastoplastic Structures, Thomas L. Paez and James T.P. Yao, EM1:Feb 76:105:11914
Response of Carolina Beach Inlet to a Deposition Basin Dredged in the Throat, Adrian J. Combe, III and George M. Watts, DIEE:Jan 76:719
Seismic Cracking of Concrete Gravity Dams, Narinder Pal, ST9:Sept 76:1827:12432
Seismic Design of Offshore Concrete Structures, Ben C. Gerwick, Jr. and Shighero Watanabe, Preprint No.2729, Apr 76, 8pp.
Seismic Design Spectra for Nuclear Power Plants, Nathan M. Newmark, John A. Blume and Kanwar K. Kapur, PO2:Nov 73:287:10142
Simulation of N-Degree Stochastic Wind Force Vector for the Three-Dimensional Dynamic Analysis of Tall Buildings, P. Jayachandran and William E. Saul, ST76:Aug 76:269
Soil Pressure and Overturning Analyses of Structures Under Three Directional Seismic Loads by Using SRSS Combination, Frank J. Hsiu, STN75:Dec 75:II-331
Structural Response to Wave and Current Forces, Song S. Wu and Chi C. Tung, OE75:June 75:849
Survey of Structural Reanalysis Techniques, Jasbir S. Arora, ST4:Apr 76:783:12056
Vortex-Excited Oscillations of Elastic Cylinders, Richard A. Skop and Owen M. Griffin, OE75:June 75:535

Responsibilities
Excelling as a Construction Contractor, Altaf Hussain, CO4:Dec 74:621:11029

Responsibility
Dams for Others, Neil F. Bogner, EFRLD:Sept 75:137
Judgment in Dam Design, William A. Wahler, EFRLD:Sept 75:167

Restraint Systems
Buckling of A Single-Crossarm Stayed Column, Raymond J. Smith, George T. McCaffrey and John S. Ellis, ST1:Jan 75:249:11071

Retaining Walls
Deformation of Deep Excavations, Dieter Stroh and Herbert Breth, NMG:June 76:II-686
Diaphragm Wall Construction Techniques, Kevin L. Nash, CO4:Dec 74:605:11025
Earth Pressure on Precast Panel Retaining Wall, Harry M. Coyle and Richard E. Bartoskewitz, GT5:May 76:441:12113
Integrated Study of Reinforced Earth-I: Theoretical Formulation, Karl M. Romstad, Leonard R. Herrmann and Chih-Kang Shen, GT5:May 76:457:12144
Legal Aspects of Open Cut Construction, Louis Cantor, Robert A. Rubin and Eugene H. Goldberg, CO4:Dec 75:923:11767
Optimizing Selection of Marine Retaining Walls, Robert C. Johnston, Max Bernheimer and Dominic A. Zarrella, GT12:Dec 76:1209:12624
Optimizing the Selection of Marine Retaining Walls, Robert C. Johnston, Max Bernheimer and Dominic A. Zarrella, Preprint No.2710, Apr 76, 28pp.
Performance of Tied-Back Walls in Clay, G. Wayne Clough and Yuet Tsui, GT12:Dec 74:1259:11028
Present and Future Trends in Foundations, Robert E. White, Preprint No.2795, Sept 76, 17pp.
Probabilistic Analysis and Design of a Retained Wall, Kaare Hoeg and Ramesh P. Murarka, GT3:Mar 74:349:10436
Reinforced Earth: A New Alternative for Earth Retention Structures, David S. Gedney and David P. McKittrick, CE:Oct 75:58
Rock Slopes in an Urban Environment (A Case History), David E. Pauls and James G. LaBastie, GT76:Aug 76:182
Seismic Design of Reinforced Earth Walls, Gregory N. Richardson and Kenneth L. Lee, GT2:Feb 75:167:11143
Session 6: Soil Structure Interaction — Dynamic Soil Pressure, John Lysmer, STN75:Dec 75:II-171
Side Friction in Model Retaining-Wall Experiment, Peter L. Bransby and Ian A.A. Smith, GT7:July 75:615:11447
Stability of Trenches Filled with Fluids, Kevin L. Nash, CO4:Dec 74:533:11006
Studies on Anchored Flexible Walls in Sand, Thomas H. Hanna and Ibrahim I. Kurdi, GT10:Oct 74:1107:10854
Tackling Major Highway Landslides in the Tennessee Mountains, David L. Royster, CE:Sept 75:85
Temporary Excavation in Varved Clay, Donald J. Murphy, G. Wayne Clough and Robert S. Woolworth, GT3:Mar 75:279:11179
Three Towns: Three Different Solutions to Stormwater Control, Charles F. Hemming, CE:Sept 76:65

Retirement
William D. Henderson: Man, Engineer, Priest Minister, Nhora I. Cortes-Comerer, CE:Mar 76:63

Return Flow
Analysis of an Irrigation Return Flow Issue, Warren Jamison, John E. Knoll and Thomas J. Crooks, IR76:July 76:532
Irrigation Return Flow Modeling for the Souris Loop, Richard W. Ribbens and Marvin J. Shaffer, IR76:July 76:545
Irrigation Return Flow Water Quality Analysis, Okay Cyril Igwe and T. L. Coulthard, IR76:July 76:519
Problem of Irrigation Return Flows, Sheldon G. Boone, IR76:July 76:673
Salinity Policy for Colorado River Basin, Gaylord V. Skogerboe and Wynn R. Walker, HY8:Aug 75:1067:11510
South Platte River Flow Correlations, Robert E. Glover, IR3:Sept 75:175:11563
Sprinkler Uniformity Effects on Quality of Return Flow, Ronald D. Bliesner and Lyman S. Willardson, IR76:July 76:508

Reverse Flow Nozzles
Turbulent Jets with Reversible Buoyancy, Subhash C. Jain and Jose M. Pena, HY9:Sept 75:1221:11586

Reverse Osmosis
Sanitary Landfill Leachates and Their Leachate Treatment, Edward S.K. Chian and Poppe B. DeWalle, EE2:Apr 76:411:12033

Reversible Lanes
The Wrong Way Is Sometimes the Right Way, Marshall Suloway, TE4:Nov 76:617:12518

Revetments
Environmental Aspects—Sacramento Bank Protection, Charles S. Mifkovic and Margaret S. Petersen, HY5:May 75:543:11326

Reviews
Classification of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY10:Oct 75:1315:11643
Review of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY11:Nov 75:1405:11693

Reynolds Number
Manning's Roughness for Artificial Grasses, Walter H. Graf and V. Heang Chhun, IR4:Dec 76:413:12603
Turbulent Structure near Smooth Boundary, Paul H. Blinco and Daryl B. Simons, EM3:June 75:241:11372

Rheological Models
New Rheological Model for Soil Behavior, Fujiya Komamura and Rodney J. Huang, GT7:July 74:807:10675
Rheological Model of Laterally Stressed Frozen Soil, Khandker A. Aziz and Jan T. Laba, GT8:Aug 76:825:12316

Rheology
Incremental Stress-Strain Relationship for Cohesionless Soil, F. Darve, S. Labanieh and R. Chambon, NMG:June 76:I-264
Undrained Stress-Strain-Time Behavior of Clays, Jean-Herve Prevost, GT12:Dec 76:1245:12644
Viscoelastic Analysis About Deformation of Weak Ground, Tomoyuki Akagi, Yoshinori Ito and Makoto Irobe, NMG:June 76:II-639

Ribs (Supports)
Macroapproach for Ribbed and Grid Plate Systems, Hota V.S. GangaRao, Amr Abd Elmeged and Virendra K. Chaudhary, EM1:Feb 75:25:11130

Rickey Medal
1976 Rickey Medal Presented to Franklyn Rogers and Edward Loane, CE:Oct 76:100

Right-Of-Way
Community Acceptance of Highway Corridor Development, Douglas Nunn, EI3:July 75:337:11414
Community Role in Modal Choice for Transit System Planning, Robert E. Paaswell and Janice Pafka-Gerbig, UP1:May 75:35:11305
Utility Land Corridors Location Model — Environmental Assessment, Thomas E. Wester and Dennis W. Weeter, Preprint No.2653, Apr 76, 29pp.
8-Story Building Moved to Avoid Wrecker's Ball, Antonio Paez Restropo, CE:June 75:62

Right of Way Acquisition
Citizen Participation: Assessing Public Attitudes, Desmond M. Connor, CE:Oct 75:78
Genesee Expressway Corridor Analysis, Lawrence H. Lehman, Robert J. Trapani and Philip A. Habib, TE4:Nov 75:781:11726
Utility Land Corridors Location Model — Environmental Assessment, Thomas E. Wester and Dennis W. Weeter, Preprint No.2653, Apr 76, 29pp.

Rigid Frames
Automated Analysis of Standard Buildings, Norman R. Maham, ST4:Apr 75:751:11265
Composite Connections to External Columns, Peter Ansourian and Jack William Roderick, ST8:Aug 76:1609:12320
Conditioning of Structural Flexibility Matrix, Charles H. Goodspeed and Michael J. Martin, ST8:Aug 74:1677:10763
Fifty-Year Advancement in Concrete Bridge Construction, Tung. Y. Lin and Felix Kulka, CO3:Sept 75:491:11558
Nonlinear Optimum Design of Dynamic Damped Frames, Franklin Y. Cheng and Mark E. Botkin, ST3:Mar 76:609:11993
Optimum Frame Design Using Available Sections, Kuan-Chen Fu and Kuang-Wei You, ST76:Aug 76:1049
Optimum Structural Design with Dynamic Constraints, Juan H. Cassis and Lucien A. Schmit, Jr., ST10:Oct 76:2053:12491

Rigidity
Analysis of Some Double Layer Grids, Andrew G. Collings, ST8:Aug 76:1591:12342
Buckling Strength of Multiple Stiffened Plates, Akio Hasegawa, Koji Oto and Fumio Nishino, ST76:Aug 76:937
A New Concept for the Relative Rigidity of Rafts, B. Ramanathan, NMG:June 76:I-489

Rigid Pavements
Concrete Applications in Transportation Construction (1891-1976), Gordon K. Ray, Preprint No.2745, Sept 76, 29pp.
Cumulative Deflection and Pavement Performance, William H. Highter and Milton E. Harr, TE3:Aug 75:537:11507
Early Developments in American Concrete, Russell S. Fling, Preprint No.2791, Sept 76, 24pp.
A History of Joints in Concrete Pavements, John P. Cook, CO1:Mar 75:29:11201
Maintenance Management Aids, Eugene L. Marvin, Preprint No.2637, Apr 76, 25pp.
Pavement Applications for Steel Fibrous Concrete, David R. Lankard and Alvin J. Walker, TE1:Feb 75:137:11108
Slipform Pavers Prove Their Versatility, Gordon K. Ray, Edwin C. Lokken and Robert G. Packard, TE4:Nov 75:721:11725

Rill Erosion
Hydraulics of Slope Erosion by Overland Flow, Saburo Komura, HY10:Oct 76:1573:12489

Rings
Inclastic Buckling of Rings with Residual Stresses, Subhash C. Anand and Alvin R. Griffith, EM5:Oct 73:927:10063
Out-of-Plane Vibration of Thick Circular Ring, James Kirkhope, EM2:Apr 76:239:12022

Riparian Plants
Environmental Aspects—Sacramento Bank Protection, Charles S. Mifkovic and Margaret S. Petersen, HY5:May 75:543:11326

Riparian Rights
Your Water — How Secure?, John W. Bird, IR3:Sept 76:363:12424

Riprap
Probabilistic Approach to Design of Riprap for River Bank Protection, Ruh-Ming Li, Daryl B. Simons, Paul H. Blinco and Md. Abdus Samad, WW76:Aug 76:1572
Safety Factors for Riprap Protection, Michael A. Stevens, Daryl B. Simons and Gary L. Lewis, HY5:May 76:637:12115
Wave Period Effect on the Stability of Riprap, John P. Ahrens and Bruce L. McCartney, OE75:June 75:1019

Risk
Alberta's Viewpoint on Risk, John W. Campbell, EFRLD:Sept 75:147
Circular Steel Tubes in Bending, Donald R. Sherman, Preprint No.2694, Apr 76, 27pp.
Civil Engineering and Offshore Construction, Ben C. Gerwick, Jr., Preprint No.2753, Sept 76, 6pp.
Conference Summary, Joseph J. Ellam, EFRLD:Sept 75:181
Dams in Relation to Balanced Public Safety, Bob Buehler, EFRLD:Sept 75:27
Development of Analysis Techniques for Deployment, Robert W. Thresher, OE75:June 75: 593
Development of Expectancy Maps and Risk Analysis, Neville C. Donovan, Bruce A. Bolt and Robert V. Whitman, Preprint No.2805, Sept 76, 19pp.
Engineering Risk Management of Natural and Man-Made Hazards, Larry T. Lee and Jon D. Collins, Preprint No.2757, Sept 76, 30pp.
Evaluation of an Existing Building Complex for Earthquake Response, Sigmund A. Freeman, ST76: Aug 76:781
Failure Modes for Offshore Platforms: Part II — Fatigue, Peter W. Marshall, ST76:Aug 76:309
Individual Statement During Summarization Session, Bob Buehler, EFRLD:Sept 75:199
Optimal Design for Highway Drainage Culverts, George K. Young, Jr., Mitchell R. Childrey and Roy E. Trent, HY7:July 74:971:10676
Optimal Risk-Based Design of Storm Sewer Networks, Wilson H. Tang, Larry W. Mays and Ben Chie Yen, EE3:June 75:381:11360
Policy-Making and Acceptable Earthquake Risk, Robert A. Olson, EFRLD:Sept 75:141
Procedures for Evaluation of Earthquake Risk to Buildings, R. Martin Czarnecki, E. C. Wang and Sigmund A. Freeman, Preprint No.2804, Sept 76, 28pp.
Risk of Wind Damage to Transmission Line Systems, Alain H. Peyrot and Tarun R. Naik, ST76:Aug 76: 54
Two Dam Break Routing Models, Thomas N. Keefer and Raul S. McQuivey, WW76:Aug 76:201

Risk Prediction (Accidents)
Development of Expectancy Maps and Risk Analysis, Neville C. Donovan, Bruce A. Bolt and Robert V. Whitman, Preprint No.2805, Sept 76, 19pp.
Procedures for Evaluation of Earthquake Risk to Buildings, R. Martin Czarnecki, E. C. Wang and Sigmund A. Freeman, Preprint No.2804, Sept 76, 28pp.

River Basin Development
The Great River Study — A New Perspective in River Management, William R. Pearson and Dennis E. Cin, WW76:Aug 76:536
Mathematical Model of the Bicol River System (Luzon, Philippines), Armando Ballofet and Virgilio A. Sahagun, WW76:Aug 76:170
Utilization and Control of Rivers in the Southwest, George A. Whetstone, WW76:Aug 76:1149

River Basin Planning
Development Versus Preservation: Legal Accommodation, William E. Cox and William R. Walker, WW76:Aug 76:161
Geomorphic Thresholds: An Approach to River Management, Stanley A. Schumm and R. Michael Beathard, WW76:Aug 76:707
Mathematical Model of the Bicol River System (Luzon, Philippines), Armando Ballofet and Virgilio A. Sahagun, WW76:Aug 76:170
Screening Model for Conjunctive-Use Water Systems, Abdullatif S. Hamdan and Dale D. Meredith, HY10:Oct 75:1343:11611
Thames Barrier Project, P. A. Cox, P. J. Clark and G. Miller-Richards, WW76:Aug 76:852
Water Management in Indus River System, Riaz Nazir Tarar, WW76:Aug 76:813

River Basins
Environmental Implications of Increased Agricultural Production in International River Basins, Peter J. Reynolds, IR76:July 76:394
Estimation of Lateral Inflow Hydrographs, Maria Mimikou and Ramachandra A. Rao, WW76:Aug 76:399
River Basin Model for Simulating Flood Control Alternatives, Norbert L. Ackermann and Hiro Shigai, WW76:Aug 76:348

River Beds
Sediment Inertia as Cause of River Antidunes, Gary Parker, HY2:Feb 75:211:11127

River Currents
Increasing the Mean Current in Coastal Channels, Jacobus van de Kreeke, WW2:May 76:223:12157

River Flow
Estimating Flow Conditions for River Models, William J. Grenney and David S. Bowles, EE4:Aug 76:693:12297
Integral-Equation Analysis of Flows Over Eroding Beds, S. N. Prasad and Carlos V. Alonso, WW76: Aug 76:760
Lower Minnesota River — Capacity Study, Amardo J. Romano, WW76:Aug 76:687
Missouri River Computerized Data Bank, Glendon T. Stevens, Jr. and Bob Pierce, WW76:Aug 76:725
River Response to Development, Everett V. Richardson and Daryl B. Simons, WW76:Aug 76: 1285
Scour Holes in a Wandering Gravel River, Charles R. Neill, WW76:Aug 76:1301
Simulation of Future River Fluctuations, Douglas D. Speers, WW76:Aug 76:608

River Regulation
Computer Use for River Regulation, Charles E. Abraham, HY2:Feb 75:291:11140
Construction of the 40-Foot Channel in Columbia River, Robert O. Dodge, WW76:Aug 76:259
Notching River Training Structures: Missouri River, Thomas D. Burke, WW76:Aug 76:1647
Observations of Natural and Man-Made River Spurs, Thomas Blench, Victor J. Galay and E. K. Yaremko, WW76:Aug 76:1363
The Yellow River: Its Unique Features and Serious Problems, Tsung-Lien Chou, WW76:Aug 76:507

Rivers
Analysis of Flow through Vegetation, Sylvester Petryk, HY7:July 75:871:11457
Applicability of Unit Stream Power Equation, Chih Ted Yang and John B. Stall, HY5:May 76:559: 12103
Atmospheric Reaeration in a River Using Productivity Analysis, George M. Hornberger and Mahlon G. Kelly, EE5:Oct 75:729:11644
Classification and Analysis of River Processes, Rolf Kellerhals, Michael Church and Dale I. Bray, HY7: July 76:813:12232
Climatological Estimates of Evapotranspiration, Fred I. Morton, HY3:Mar 76:275:11974
Computer Modeling of Erodible Flood Channels and Deltas, Howard H. Chang and Joseph C. Hill, HY10:Oct 76:1461:12485
Construction of the 40-Foot Channel in Columbia River, Robert O. Dodge, WW76:Aug 76:259
Detrimental Effects of River Channelization, Gary Parker and David Andres, WW76:Aug 76:1248
Development of the Water Resources in the Tennessee Valley Region, Bevan W. Brown, Jr., Preprint No.2799, Sept 76, 22pp.
Development Versus Preservation: Legal Accommodation, William E. Cox and William R. Walker, WW76:Aug 76:161
Dimensionless Solution of Dam-Break Flood Waves, John G. Sakkas and Theodor Strelkoff, HY2:Feb 76:171:11910

Distribution of Toxic Heavy Metals in Marine and Freshwater Sediments, J. M. Brannon, R. M. Engler, J. R. Rose, P. G. Hunt and I. Smith, DIEE: Jan 76:455
Distributions of BOD and DO in Rivers and Lakes, Robert B. Banks, EE2:Apr 76:265:12028
Early American Riverports, Robert H. Allan, Preprint No.2783, Sept 76, 26pp.
Effects of Meandering in Alluvial Streams, Yasuo Onishi, Subhash C. Jain and John F. Kennedy, HY7:July 76:899:12248
Extreme Roughness of Natural River Channel, Hans J. Leutheusser and W. Orville Chisholm, HY7:July 73:1027:9831
Flood Control Arrangements for River Junctions, Mostafa M. Soliman, WW76:Aug 76:1057
Flood Routing in Meandering Rivers with Flood Plains, Danny L. Fread, WW76:Aug 76:16
Flow and Bed Topography in Channel Bends, Frank Engelund, HY11:Nov 74:1631:10963
Flow and Bed Topography in Curved Open Channels, Hideo Kikkawa, Syunsuke Ikeda and Akira Kitagawa, HY9:Sept 76:1327:12416
Hydraulic and Environmental Effects of Commercial In-Stream Dredging, Paul G. Mayer, DIEE:Jan 76: 947
Implicit Numerical Modeling of Unsteady Flows, Michael Amein and Hsiao-Ling Chu, HY6:June 75: 717:11378
Local Erosion Caused by Rapid Forced Infiltration, Brian B. Willetts and Michael E. Drossos, HY12: Dec 75:1477:11796
Maintenance Dredging on the Arkansas River, Tasso Schmidgall, WW76:Aug 76:459
Man-Induced Changes of Middle Mississippi River, Michael A. Stevens, Daryl B. Simons and Stanley A. Schumm, WW2:May 75:119:11281
Mathematical Modelling of Rivers with Flood Plains, Miodrag Radojkovic, WW76:Aug 76:56
Mechanism for Streamflow Meandering, Michael C. Quick, HY6:June 74:741:10587
Modeling the Chipuxet Ground Water Aquifer, William E. Kelly, NMG:June 76:II-1188
Nonequilibriun River Form, Michael A. Stevens, Daryl B. Simons and Everett V. Richardson, HY5: May 75:557:11334
Non-Structural Flood Control in Rivers Flowing in Their Alluvions, Fuat Senturk, WW76:Aug 76:1199
Numerical Model of St. Lawrence River Estuary, David Prandle and Norman L. Crookshank, HY4: Apr 74:517:10472
Numerical Prediction of Thermal-Regime of Rivers, Poothrikka P. Paily and Enzo O. Macagno, HY3: Mar 76:255:11997
The Recycling of a River, Kenneth R. Wright and William C. Taggart, CE:Nov 76:42
Regime Studies of the Lower Fraser, Alfred John Tamburi, WW76:Aug 76:1680
Remote Sensing of Mississippi River Characteristics, James F. Ruff, Morris M. Skinner, Brien R. Winkley, Daryl B. Simons and Dennis E. Dorratcague, WW2:May 76:189:12150
River and Cooling Water Temperature Fluctuations, Heinz Stefan and V. Nguyen Chau, HY11:Nov 76: 1613:12514
River-Ice Problems: A State-of-the-Art Survey and Assessment of Research Needs, John F. Kennedy, Cochmn. and George D. Ashton, Cochmn., HY1: Jan 74:1:10281
River Water Quality: Simulation Models or Optimization Techniques, Swami Marcondes Villela, WW76:Aug 76:305
Sediment Inertia as Cause of River Antidunes, Gary Parker, HY2:Feb 75:211:11127
Simple Method for Predicting Dispersion in Streams, Raul S. McQuivey and Thomas N. Keefer, EE4: Aug 74:997:10708
Simulation of Future River Fluctuations, Douglas D. Speers, WW76:Aug 76:608
Steady-State Water Quality Modeling in Streams, Robert Willis, Donald R. Anderson and John A. Dracup, EE2:Apr 75:245:11246
Study of Artificial Cutoffs on Gravel-Bed Rivers, Dale I. Bray and Andrew J. Cullen, WW76:Aug 76: 1399
Systematic Identification of DO-BOD Model Structure, Bruce Beck and Peter Young, EE5:Oct 76:909:12461
Thalweg Disposal of Riverine Dredged Material, Peter F. Lagasse, Daryl B. Simons and Yung H. Chen, DIEE:Jan 76:556
Theoretical Model of River Ice Jams, Mehmet S. Uzuner and John F. Kennedy, HY9:Sept 76:1365: 12412
Utilization and Control of Rivers in the Southwest, George A. Whetstone, WW76:Aug 76:1149
Water Quality Management and Information Systems, William D. Haseman, Arthur Z. Lieberman and Andrew B. Whinston, HY3:Mar 75: 477:11185
Water Quality Models Using the Box-Jenkins Method, Peter M. Huck and Grahame J. Farquhar, EE3:June 74:733:10629
Water Resources Planning — Historical Development, Theodore M. Schad, Preprint No.2754, Sept 76, 22pp.
Winter-Regime Thermal Response of Heated Streams, Poothrikka P. Paily, Enzo O. Macagno and John F. Kennedy, HY4:Apr 74:531:10479
The Yellow River: Its Unique Features and Serious Problems, Tsung-Lien Chou, WW76:Aug 76:507

River Systems

Analysis of an Irrigation Return Flow Issue, Warren Jamison, John E. Knoll and Thomas J. Crooks, IR76:July 76:532
Autogeometry of Semi-Arid Channel Systems, John Barrie Thornes, WW76:Aug 76:1715
Flood Control Arrangements for River Junctions, Mostafa M. Soliman, WW76:Aug 76:1057
Flood Routing Through River Junctions, Ben Chie Yen and A. Osman Akan, WW76:Aug 76:212
The Great River Study — A New Perspective in River Management, William R. Pearson and Dennis E. Cin, WW76:Aug 76:536
The Green Bay—Fox River System in Transition, Harold John Day, WW76:Aug 76:527
Impact of Dredging on River System Morphology, Peter F. Lagasse and Daryl B. Simons, WW76:Aug 76:434
Missouri River Stage-Discharge Shift, A. D. Berryman, Howard E. Christian and Everett V. Richardson, WW76:Aug 76:1350
Observations of Natural and Man-Made River Spurs, Thomas Blench, Victor J. Galay and E. K. Yaremko, WW76:Aug 76:1363
Optimal River Cross Sections for Flood Routing, V. Seetharama Rao, Dinshaw N. Contractor and Chinchai Tiyamani, WW76:Aug 76:421
River Basin Model for Simulating Flood Control Alternatives, Norbert L. Ackermann and Hiro Shigai, WW76:Aug 76:348
River Response to Development, Everett V. Richardson and Daryl B. Simons, WW76:Aug 76: 1285
Utilization and Control of Rivers in the Southwest, George A. Whetstone, WW76:Aug 76:1149
Water Management in Indus River System, Riaz Nazir Tarar, WW76:Aug 76:813

River Training

Construction of the 40-Foot Channel in Columbia River, Robert O. Dodge, WW76:Aug 76:259

Riveted Joints

Fatigue Life Extension of Riveted Connections, Harold S. Reemsnyder, ST12:Dec 75:2591:11795

Riveting

Fifty Years of Riveted, Bolted, and Welded Steel Construction, William E. Munse, CO3:Sept 76:437: 12399

Rivets
Connections for Steel Structures — History, State of Art, and Potential Developments, John W. Fisher, Preprint No.2748, Sept 76, 21pp.

Roadbeds
Plastic Filter Fabrics Have Bright Future, Richard N. Seemel, CE:Mar 76:57
Soil Moisture Movement by Temperature Gradient, Arved J. Raudkivi and Nguyen Van U'u, GT12:Dec 76:1225:12645

Road Construction
Maintenance Management Aids, Eugene L. Marvin, Preprint No.2637, Apr 76, 25pp.

Road Curves
Transition Curves for Speed Changes, Jacob Greenstein, TE4:Nov 76:699:12525

Road Design
Fracture of Pavement Materials, Geoffrey E. Blight, TE4:Nov 73:801:10139
Optimal Design for Highway Drainage Culverts, George K. Young, Jr., Mitchell R. Childrey and Roy E. Trent, HY7:July 74:971:10676

Roads
American Road Building - Fifty Years of Progress, Herbert W. Busching and Randolph Russell, CO3: Sept 75:565:11577
Engineering Surveying: Chapters 2, 5, 6, 8, 16, and 20, George M. Mayfield, Chmn., SU1:Dec 76:59: 12648
Gap-Graded Concrete for Paving Construction, Ram Kinkar Ghosh and Mukul Ranjan Chatterjee, CO1: Mar 76:227:11988
New and Conventional Engineering Uses of Fly Ash, Ramesh C. Joshi, Donald M. Duncan and Howard M. McMaster, TE4:Nov 75:791:11730
Rutting Failure in Full-Depth Asphalt Pavement, Jacob Greenstein and Moshe Livneh, TE4:Nov 75: 737:11690
Surface Texture of British Concrete Pavements, William E. Murphy and David P. Maynard, TE1: Feb 75:115:11107

Rock Bolts
Construction Redesign — Woodstock Rockslide, N.H., Brian K. Fowler, GT76:Aug 76:386
Design Criteria for Anchor Cables and Bolting in Underground Openings, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:II-859
Model Study of Tunnel Prereinforcement, Gregory E. Korbin and Tor L. Brekke, GT9:Sept 76:895:12415
Rock Slopes in an Urban Environment (A Case History), David E. Pauls and James G. LaBastie, GT76:Aug 76:182

Rock Fills
In-situ Shear Test for Rock Fills, Surendra P. Jain and Ramesh C. Gupta, GT9:Sept 74:1031:10823
In-Situ Undrained Shear Strength of Two Marine Clays, Demetrious Koutsoftas and Joseph A. Fischer, GT9:Sept 76:989:12431

Rock Mechanics
Analysis of Backpacked Liners, Sidiq M. Dar and Robert C. Bates, GT7:July 76:739:12242
Analysis of Behavior of Edward Hyatt Power Plant, Fred H. Kulhawy and Richard F. Flanagan, GT3: Mar 75:243:11161
Computerized Analysis of Rock Slope Stability, David S. Campbell, John T. Christian and Herbert H. Einstein, GT76:Aug 76:415
Design Criteria for Anchor Cables and Bolting in Underground Openings, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:II-859
Determining Bedrock Elevation by Acoustic Sounding Technique, Wesley E. Stimpson, Gary S. Brierley and Thomas K. Liu, GT76:Aug 76:1
Failures in Limestones in Humid Subtropics, George F. Sowers, GT8:Aug 75:771:11521
Finite Element Analysis of Grout Propagation, Manfred Wallner and Walter Wittke, NMG:June 76:II-1119
Finite Element Study of a Shallow Tunnel in Rock Exhibiting Clay-Induced Anisotropy, C. F. Lee and Kwan Y. Lo, NMG:June 76:II-834
Importance of Groove Spacing in Tunnel Boring Machine Operations, Parviz F. Rad, GT9:Sept 75: 949:11589
Initial Stresses in Natural Slope Analysis, Robin N. Chowdhury, GT76:Aug 76:404
Libby Dam Left Abutment Rock Wedge Stability, James V. Hamel, GT76:Aug 76:361
Mechanics of the Frank Slide, John Krahn and Norbert R. Morgenstern, GT76:Aug 76:309
A Numerical Analysis of the Maximum Earth Pressure Acting on Tunnel Lining, Shunsuke Sakurai and Yoshiaki Yamamoto, NMG:June 76:II-821
Numerical Treatment of Some Geomechanical Problem Areas in Oil and Natural Gas Production, Jan Geertsma, NMG:June 76:II-759
Parametric Studies as a Design Aid in Tunneling, K. Kovari, H. Hagedorn and P. Fritz, NMG:June 76: II-773
Rock Slopes in an Urban Environment (A Case History), David E. Pauls and James G. LaBastie, GT76:Aug 76:182
A Stability Study of a Concrete Arch Dam Rock Abutment, Edward C.K. Tom, Nestor T. Mirafuente and Efren Estrella, GT76:Aug 76:264
Study of Deformation Characteristics and Analyses of Jointed Rock Masses, Ryuichi Iida, Koji Hojo and Kozo Saito, NMG:June 76:I-232
Thermoelastic/Plastic Analysis in Rock Mechanics, William G. Pariseau, NMG:June 76:II-1168
Three-Dimensional FE Analysis of a Room and Pillar Coal Mine (A Comparison with Experiment), Robert T. Langland, NMG:June 76:II-802
Viscoplastic Constitutive Matrix Corresponding to the Hyperbolic Sine Creep Law, Guenter W. Borm, NMG:June 76:I-357
Volume Changes in Models of Jointed Rock, Edwin T. Brown, TN: GT3:Mar 76:273:11953
3-D Finite Element Analysis of a Dam Foundation, Walter Wittke and Stephen Semprich, NMG:June 76:III-1385
3-D Stability Analysis of Tunnels in Jointed Rock, Walter Wittke and Bernd Pierau, NMG:June 76:III-1401

Rock Pressures
Analysis of Backpacked Liners, Sidiq M. Dar and Robert C. Bates, GT7:July 76:739:12242

Rock Properties
Analysis of Backpacked Liners, Sidiq M. Dar and Robert C. Bates, GT7:July 76:739:12242
Dewatering Rock for Construction, George F. Sowers, GT76:Aug 76:200
Field Measurement of Permeability in Soil and Rock, Victor Milligan, GT75:June 75:II-3
Foundation Treatment for Little Blue Run Dam, Gerald R. Thiers, Larry W. Lobdell and Bernard M. Mihalcin, GT76:Aug 76:283
Rock Squeeze Study of Two Deep Excavations at Niagara Falls, C. F. Lee and Kwan Y. Lo, GT76: Aug 76:116
Rock Strain Recovery — Factor in Foundation Design, T. C. Nichols, Jr. and W. Z. Savage, GT76: Aug 76:34
Study of Deformation Characteristics and Analyses of Jointed Rock Masses, Ryuichi Iida, Koji Hojo and Kozo Saito, NMG:June 76:I-232
Swelling Rock: A Review, Ernest N. Lindner, GT76: Aug 76:141

Rocks
Some Applications of Prestressing in Foundation Construction, Ingvar Schousboe, CO2:June 75:403: 11395

Rockslides
Construction Redesign — Woodstock Rockslide, N.H., Brian K. Fowler, GT76:Aug 76:386
Libby Dam Left Abutment Rock Wedge Stability, James V. Hamel, GT76:Aug 76:361
Mechanics of the Frank Slide, John Krahn and Norbert R. Morgenstern, GT76:Aug 76:309

Rock Slope Stability
Computerized Analysis of Rock Slope Stability, David S. Campbell, John T. Christian and Herbert H. Einstein, GT76:Aug 76:415
Construction Redesign — Woodstock Rockslide, N.H., Brian K. Fowler, GT76:Aug 76:386
Libby Dam Left Abutment Rock Wedge Stability, James V. Hamel, GT76:Aug 76:361
Rock Slopes in an Urban Environment (A Case History), David E. Pauls and James G. LaBastie, GT76:Aug 76:182
Stability Analysis of Cut Slopes at Auburn Dam, J. Lawrence Von Thun, GT76:Aug 76:349

Roll
Six-Degrees-of-Freedom Motions, Moored Ship in Waves, Basil W. Wilson, OE75:June 75:646

Romania
Construction Information Systems in Romania, Daniel W. Halpin and Nicolai Tutos, CO2:June 76: 335:12176

Roof Failures
The Darwin Cyclone — Valuable Lesson in Structural Design, George R. Walker, Joseph E. Minor and Richard D. Marshall, CE:Dec 75:82

Roofs
Behavior of Prestressed Cable Truss Structures, Dwight E. Urelius and David W. Fowler, ST8:Aug 74:1627:10747
Calculation of Steel Diaphragm Behavior, J. Michael Davies, ST7:July 76:1411:12254
Cladding and the Wind, Keith J. Eaton, ST5:May 76: 1043:12114
Deflection and Ponding of Steel Joists, R. Richard Avent, ST7:July 76:1399:12241
Design of Hipped Hypar Shells, Ahmed Shaaban and Milo S. Ketchum, ST11:Nov 76:2151:12543
Largest and Lightest Fabric Roof to Date, David H. Geiger, CE:Nov 75:82
Membrane Solutions for Shells with Edge Constraint, Charles R. Steele, EM3:June 74:497:10605
Olympic Construction for Olympic Games, CE:June 76:56
Parametric Resonance of Suspension Roofs in Wind, Haruo Kunieda, EM1:Feb 76:59:11899
Rainwater Ponding on Beam-Girder Roof Systems, R. Richard Avent and William G. Stewart, ST9: Sept 75:1913:11564
Statics and Dynamics of Cable Trusses, H. Max Irvine, EM4:Aug 75:429:11506
Steel Stress-Ribbon Concept — Will It Save Money?, Robert J. Wheen, CE:May 76:74
University of Idaho Barrel-Arch Roof Wins Outstanding Structural Engineering Award, CE: June 76:48

Root Systems
Consolidation of Root-Penetrated Clays: A Case Study, Michael W. O'Neill, B. Kent Merritt and Ronald Calsing, GT8:Aug 76:857:12318
Effects of Deforestation of Slopes, Colin E. Brown and Maw S. Sheu, GT2:Feb 75:147:11141

Rotating Components
Instability Mechanisms for Rotating Appendages, John O. Dow and Chuan C. Feng, Preprint No.2801, Sept 76, 27pp.

Rotation
Kink Formation and Rotational Response of Single and Multistrand Electromechanical Cables, Francis C. Liu, OE75:June 75:546
Vane Shear Strengths at Two High Rotation Rates, Alexander D. Smith and Adrian F. Richards, OE75:June 75:421

Roughness
Criteria Development to Evaluate Runway Roughness, Benjamin Frank McCullough and David Charles Steitle, TE2:May 75:345:11333

Roughness (Hydraulic)
Accurate Explicit Equation for Friction Factor, Akalank K. Jain, TN: HY5:May 76:674:12129
Extreme Roughness of Natural River Channel, Hans J. Leutheusser and W. Orville Chisholm, HY7:July 73:1027:9831
Flow in Corrugated Pipes, Robert J. Shipton and Harald R. Graze, HY9:Sept 76:1343:12414
Friction Factor under Oscillatory Waves, J. William Kamphuis, WW2:May 75:135:11292
Hydraulic Transport of Copper Tailings, Pablo Kleiman, TN: HY10:Oct 76:1589:12444
Manning's Roughness for Artificial Grasses, Walter H. Graf and V. Heang Chhun, IR4:Dec 76:413: 12603
Physical Model Study of Border-Strip Irrigation, Graham A. Jobling and A. Keith Turner, IR4:Dec 73:493:10195
Roughness Characteristics of the Lower Mississippi, Lamont G. Robbins, WW76:Aug 76:1209
Roughness Effects on Rectangular Free Overfall, Nallamuthu Rajaratnam, Durfakula Muralidhar and Spyridon Beltaos, HY5:May 76:599:12152

Roughness Coefficient
Hydraulics of Sheet Flow in Wetlands, Bent A. Christensen, WW76:Aug 76:746
Influence of Equivalent Sand Roughness on the Dispersion Coefficient in Laboratory and Natural Streams, Ho-Shong Hou and Bent A. Christensen, WW76:Aug 76:1179
Roughness Characteristics of the Lower Mississippi, Lamont G. Robbins, WW76:Aug 76:1209
Upstream Flood Lowering in Reservoirs, Bob Buehler, HY2:Feb 76:151:11911

Route Preferences
A Guide for Municipalities for Bicycle Planning, Carmen W. Daecher, BP75:Dec 75:117
Problems in Route Selections for Variable Characteristics of Cyclists, James L. Konski, BP75: Dec 75:261

Routes
Computer Location of Bikeways, William L. Smith and Jerry S. Murphy, BP75:Dec 75:66
A Guide for Municipalities for Bicycle Planning, Carmen W. Daecher, BP75:Dec 75:117
Problems in Route Selections for Variable Characteristics of Cyclists, James L. Konski, BP75: Dec 75:261

Route Surveys
Computer Location of Bikeways, William L. Smith and Jerry S. Murphy, BP75:Dec 75:66
A Guide for Municipalities for Bicycle Planning, Carmen W. Daecher, BP75:Dec 75:117
Problems in Route Selections for Variable Characteristics of Cyclists, James L. Konski, BP75: Dec 75:261

Routing
An Algorithm for Route Deviation Service, Stanley T.L. Lung and Wilfred W. Recker, TE1:Feb 76:161: 11931
Method for Delineating Districts of Varying Shape, Geoffrey N. Berlin, TE4:Nov 76:805:12537
Minimum Cost in Residential Refuse Vehicle Routes, Jon C. Liebman, James W. Male and Magne Wathne, EE3:June 75:399:11368
Nonlinear Channel Routing by Computer, Michael C. Quick and Anthony Pipes, HY6:June 75:651:11353

Royce J. Tipton Award
1976 Royce J. Tipton Award Presented to Jerald E. Christiansen, CE:Oct 76:103

Rubble Mounds
Parameters Affecting Stability of Rubble Mounds, Per Moller Bruun and Palmi Johannesson, WW2: May 76:141:12136

Rudolph Hering Medal
Philadelphia Pilots--Builds Oxygen Activated Sludge, Carmen F. Guarino, Michael D. Nelson and Allan B. Edwards, EE4:Aug 74:919:10722

Runge-Kutta Method
Integration of Linear Equations of Motion, Robert J. Melosh, ST7:July 75:1551:11444
A Numerical Solution for Viscoelastic Half Planes, Gautam Dasgupta, EM4:Aug 76:601:12325

Runoff
Aspects of Hydrological Effects of Urbanization, William J. Schneider, Chmn., HY5:May 75:449: 11301
Autogeometry of Semi-Arid Channel Systems, John Barrie Thornes, WW76:Aug 76:1715
Characterization and Models of the Watershed Storage Process, A. R. Rao, Pen-Chih Tao and C. Rukvichai, Preprint No.2663, Apr 76, 27pp.
Climatological Estimates of Evapotranspiration, Fred I. Morton, HY3:Mar 76:275:11974
Coal Pile Leachate—Quantity and Quality Characteristics, William C. Anderson and Mark P. Youngstrom, EE6:Dec 76:1239:12626
Concepts in the Control of Nonpoint Water Pollution, M. H. Frere, David A. Woolhiser, J. H. Caro, B. A. Stewart and W. H. Wischmeier, Preprint No.2667, Apr 76, 24pp.
Controlling Runoff from Construction Sites, Eugene E. Dallaire, CE:Oct 76:73
Design of Irrigation Runoff Recovery Systems, Glen E. Stringham and Safa N. Hamad, IR3:Sept 75:209: 11569
Discharge Equations for HS, H, and HL Flumes, Wendell R. Gwinn and Donald A. Parsons, HY1: Jan 76:73:11874
Dredged Material Confinement Facilities as Solid-Liquid Separation Systems, Raymond J. Krizek, Joseph A. FitzPatrick and Dimitrios K. Atmatzidis, DIEE:Jan 76;609
Effect of Snow Cover on Upward Movement of Soil Moisture, Eugene L. Peck, IR4:Dec 74:405:10989
Emergency Assistance on Flood Damage in North Dakota Under Section 216 of the Flood Control Act of 1950, A. Richard Moum, IR76:July 76:76
Equalization of Flow Variations in Combined Sewers, Lars-Eric Janson, Stein Bendixen and Anders Harlaut, EE6:Dec 76:1139:12596
Estimation of Washload Produced on Certain Small Watersheds, Oswald Rendon-Herrero, HY7:July 74: 835:10638
Finite Element Solution of Saint-Venant Equations, Richard L. Cooley and Syed Afaq Moin, HY6:June 76:759:12213
Flood Routing Through a Balancing Lake, Elsayed M. Elsawy and Toney Edgeley, WW76:Aug 76: 1039
Hydrologic Impact of Planned Unit Developments, Richard H. McCuen and Harry W. Piper, UP1:May 75:93:11329
Hydrology of Porous Pavement Parking Lots, Thomas J. Jackson and Robert M. Ragan, HY12: Dec 74:1739:11010
The Hydrology of the Upper 12-in. (30-cm) of Well-Drained, Imperfectly Drained, and Poorly Drained Mineral Soil Profiles, Peter S. Chisholm and Robert W. Kirkness, IR76:July 76:193
Independent Comparison of Three Urban Runoff Models, David P. Heeps and Russell G. Mein, HY7:July 74:995:10685
Irrigation Tailwater Loss and Utilization Equations, Arland D. Schneider, TN: IR4:Dec 76:461:12592
Nonpoint Source Pollution from Agricultural Runoff, Douglas A. Haith and John V. Dougherty, EE5:Oct 76:1055:12481
Nonpoint Sources of Pollution: A Federal Perspective, Mark A. Pisano, EE3:June 76:555: 12211
Planning and Control of Combined Sewerage Systems, William R. Giessner, Robert T. Cockburn, Frank H. Moss, Jr. and Mark E. Noonan, EE4:Aug 74:1013:10744
Pollution Prediction Model of Long Island Sound, Malcolm J. Bowman, OE75:June 75:1084
QUURM — Implications for the Design of Urban Drainage Systems, W. Edgar Watt, Kenneth C. Wilson and Joan E. Eaton, IR76:July 76:580
Runoff Files for Flood Hydrograph Simulation, Alan M. Lumb and L. Douglas James, HY10:Oct 76: 1515:12499
Salt Storage and Runoff in Urban Watershed, Richard H. Hawkins, EE4:Aug 76:737:12292
Sediment Control during Highway Construction in Central Pennsylvania, Lloyd A. Reed, IR76:July 76: 497
Sediment Runoff During Highway Construction, William G. Weber, Jr. and Lloyd A. Reed, CE:Mar 76:76
Selection of Models for Urban Drainage Problems: Technical Aspects and Non-Technical Constraints, Paul E. Wisner, Adel F. Ashmalla and Patrick A. Ahern, IR76:July 76:246
Shin-Shen Canal Diversion Structure — Taipei, Taiwan, Richard R. Deussen, WW76:Aug 76:1459
Simulation of Agricultural Runoff, Anthony S. Donigian, Jr. and Norman H. Crawford, Preprint No.2670, Apr 76, 27pp.
Simulation of Quality of Urban Drainage Effluents, Jiri Marsalek, IR76:July 76:564
Storm Water Management for the Merivale Industrial Area — Township of Nepean, J. C. Anderson, IR76:July 76:593
Stormwater Studies and Alternatives in Atlanta, Robert F. Holbrook, Armando I. Perez, Billy G. Turner and Herbert I. Miller, EE6:Dec 76:1263: 12614
Theory of Storage and Treatment-Plant Overflows, Charles D.D. Howard, EE4:Aug 76:709:12310
Urban Runoff by Linearized Subhydrographic Method, Jong-Song Chien and Krishan K. Saigal, HY8:Aug 74:1141:10766
Urban Runoff Pollution Control—State-of-the-Art, Richard Field and John A. Lager, EE1:Feb 75:107: 11129
Water Harvesting — Modern Application of an Ancient Method, Allen R. Dedrick, CE:Oct 76:86
Water Yield Model Using SCS Curve Numbers, Jimmy R. Williams and William V. LaSeur, HY9: Sept 76:1241:12377

Runoff Coefficient
Synthetic Design Hyetograph and Rational Runoff Coefficient, Jong-Song Chien and Simsek Sarikelle, IR3:Sept 76:307:12375

Runoff Forecasting
Prediction of Flood Volume from Small Humid Region Watersheds, Sie Ling Chiang, HY7:July 75: 817:11466
Selection of Models for Urban Drainage Problems: Technical Aspects and Non-Technical Constraints, Paul E. Wisner, Adel F. Ashmalla and Patrick A. Ahern, IR76:July 76:246

Runways
Criteria Development to Evaluate Runway Roughness, Benjamin Frank McCullough and David Charles Steitle, TE2:May 75:345:11333
Hawaii's Offshore Runway, Wayne L. Rickerd, Preprint No.2696, Apr 76, 19pp.
Runway Rebuilding with Daily Use, Grant S. Anderson and Kenneth T. Giles, CE:Mar 75:78

Runway Surfaces
Criteria Development to Evaluate Runway Roughness, Benjamin Frank McCullough and David Charles Steitle, TE2:May 75:345:11333

Ruptures
Choice and Application of Computer Programs in Pipe Whip Analysis, Vera F. Dunder and Klaus-Jurgen Bathe, STN75:Dec 75:II-379

Rural Areas
Project Formulation in Today's World — Some Rural Development Dimensions, Graham F. Donaldson, IR76:July 76:700

Rustproofing
Zinc Paint Can Save $500,000 On Your Powerplant, Dean M. Berger, CE:Oct 76:66

Sacramento River
Environmental Aspects—Sacramento Bank Protection, Charles S. Mifkovic and Margaret S. Petersen, HY5:May 75:543:11326

Safety
The Agency, The Owner, and The Engineer, in Texas, Noble J. Campbell, EFRLD:Sept 75:99
Alberta's Viewpoint on Risk, John W. Campbell, EFRLD:Sept 75:147
ASCE and Nuclear Power Plants, Arthur J. Fox, Jr., EI3:July 76:279:12259
Bicycles and Traffic, Harold C. Munn, TE4:Nov 75:753:11729
Choice and Application of Computer Programs in Pipe Whip Analysis, Vera F. Dunder and Klaus-Jurgen Bathe, STN75:Dec 75:II-379
Conference Summary, Joseph J. Ellam, EFRLD:Sept 75:181
Corps Guidelines for Dam Safety Inspection Need Revamping, Bob J. Buehler, CE:Jan 75:74
Dam Safety — Texas Style, Joe D. Carter, EFRLD:Sept 75:79
Dams in Relation to Balanced Public Safety, Bob Buehler, EFRLD:Sept 75:27
Designing for the Disadvantaged: Optimum Design Considers All Users, John J. Fruin, CE:Mar 75:65
Engineering Risk Management of Natural and Man-Made Hazards, Larry T. Lee and Jon D. Collins, Preprint No.2757, Sept 76, 30pp.
Federal Legislation and Activities for Dam Safety, Homer B. Willis, EFRLD:Sept 75:5
A History of Bureau of Reclamation Construction-Part II, Harold G. Arthur, CO1:Mar 75:69:11190
Incorporating Highway Safety into Level of Service, Walter J. Diewald, TE2:May 74:417:10557
Individual Statement During Summarization Session, Bob Buehler, EFRLD:Sept 75:199
Inductive Approaches to Structural Safety, Daniele Veneziano, EI1:Jan 76:81:11871
Liability of the United States Under the Federal Tort Claims Act (28 U.S.C. ¶¶ 1346(b), 2672-80), John R. Little, Jr., EFRLD:Sept 75:121
LNG Terminals, Lloyd J. Weverka and Charles J. Lord, OE75:June 75:732
Monetary Values of Life and Health, Bob Buehler, HY1:Jan 75:29:11047
National Program of Inspection of Dams — Existing Practices and Capabilities, Charles F. Corns, EFRLD:Sept 75:17
New Licensing Philosophy Concerning Soil Structure Interaction, Kanwar K. Kapur, STN75:Dec 75:II-238
New Safety and Service Guides for Sight Distance, Ronald C. Pfefer, TE4:Nov 76:683:12517
One Owners Dam Safety Program and Its Application Under Government Regulations, Thomas A. Kelly, EFRLD:Sept 75:105
Opening Remarks, Joseph J. Ellam, EFRLD:Sept 75:1
OSHA Trenching and Shoring Standards, George E. Mason and Steven Shimp, CO2:June 75:377:11377
An Outline of the Enforcement of Safety of Dams Statutes in California, Porter A. Towner, EFRLD:Sept 75:87
Preparation of Surveying Safety Manual for Missouri, Ward R. Malisch and Arthur W. Jacobs, SU1:Oct 75:129:11656
Reducing Construction Accidents—Top Management's Role, Raymond E. Levitt and Henry W. Parker, CO3:Sept 76:465:12384
Report on Observations of Attendees at the EF Conference on 'Life Span of Structures', Michael N. Salgo, EI1:Jan 76:47:11870
Responsibility and Liability of Public and Private Interests on Dams, Jerry Phelan, EFRLD:Sept 75:63
Review and Responsibility of State Dam Safety Programs, Bruce A. Tschantz, EFRLD:Sept 75:51
Roadside Slope Design for Safety, Eugene L. Marquis and Graeme D. Weaver, TE1:Feb 76:61:11922
Safety Factors for Riprap Protection, Michael A. Stevens, Daryl B. Simons and Gary L. Lewis, HY5:May 76:637:12115
Seismic Qualification — Philosophy and Methods, Charles W. Roberts and George D. Shipway, PO1:Jan 76:113:11822
A Structural Design Decision Methodology for Nuclear Power Plants, Samad Zendehrouh and Masanobu Shinozuka, ST76:Aug 76:517
Surface Texture of British Concrete Pavements, William E. Murphy and David P. Maynard, TE1:Feb 75:115:11107
Survival in the Legal Jungle, Frederick J. Richards, Jr., Preprint No.2761, Sept 76, 4pp.
Text of Comments Regarding California's Legal Experience in the Liability of Public Interests, Robert W. James, EFRLD:Sept 75:115
Tornado Design Winds Based on Risk, Robert C. Garson, Jose Morla Catalan and C. Allin Cornell, ST9:Sept 75:1883:11559

Safety Engineering
LNG Terminals, Lloyd J. Weverka and Charles J. Lord, OE75:June 75:732

Safety Factor
Embankment on Soft and Sensitive Clay Foundation, Oscar Dascal and Jean-Pierre Tournier, GT3:Mar 75:297:11193
Safety Factor Evaluation for Single Piles in Sand, James Neil Kay, GT10:Oct 76:1093:12494

Safety Factors
Commentary on Safety Factors in Plastic Design, Burl R. Richardson, TN: CO4:Dec 76:683:12590
The Safety of Structural Steel Columns, Reidar Bjorhovde, Preprint No.2809, Sept 76, 27pp.

Safety Standards
LNG Terminals, Lloyd J. Weverka and Charles J. Lord, OE75:June 75:732

Salaries
CE Compensation Up Nearly 20% Overall in Two Years, ASCE Salary Survey Shows, CE:Mar 76:83
Employee Benefits, Kneeland A. Godfrey, Jr., CE:Jan 75:76
Kansas Solution to Unionism of Professionals, Bruce F. McCollum, EI3:July 76:283:12253
Salary Guidelines, Robert C. West, EI2:Apr 75:287:11212

Salary Surveys
1975 ASCE Salary Survey, Schaefer J. Dixon, Chmn., EI2:Apr 76:225:12090

Saline Groundwater
Management of Waste Fluids in Salaquifers, Raphael G. Kazmann, Oscar K. Kimbler and Walter R. Whitehead, IR4:Dec 74:413:10991

Saline Water-Freshwater Interfaces
Applications of Mixing Experiments to Estuaries, Robert R. Long, OE75:June 75:1400
Predicting Estuarine Salinity from River Inflows, James A. Harder, Preprint No.2674, Apr 76, 23pp.

Saline Water Intrusion
Salinity Intrusion Mechanisms in Estuaries, John M. Hamrick, OE75:June 75:1382
Water Quality and Aquitard Permeability, James H. Hardcastle and James K. Mitchell, IR2:June 76: 205:12203

Salinity
Estimated Indirect Cost of Urban Water Use, Charles H. Lawrance, EE4:Aug 75:517:11482
Influence of Tidal Inlets on Salinity in Estuaries, N. Jothi Shankar, WW4:Nov 75:369:11692
International Aspects of Irrigation and Drainage in the Yuma Area, Wesley E. Steiner, Jr., IR76:July 76:558
Irrigation Management for Salt Control, Jan van Schilfgaarde, Leon Bernstein, James D. Rhoades and Stephen L. Rawlins, IR3:Sept 74:321:10822
Irrigation Research to Practice in Grand Valley, Gaylord V. Skogerboe, Wynn R. Walker and Robert G. Evans, IR76:July 76:19
Irrigation Return Flow Water Quality Analysis, Okay Cyril Igwe and T. L. Coulthard, IR76:July 76:519
Migration of Subgrade Salts Damages Thin Pavements, Geoffrey E. Blight, TE4:Nov 76:779: 12542
Numerical Computation of Well-Mixed Estuarine Flows, John P. Grubert, HY7:July 76:955:12255
Oceanographic Survey in Support of FNPP-AGS Site, Lloyd F. Lewis, OE75:June 75:9
The Port of Philadelphia — Past and Present, Clarence F. Wicker, Preprint No.2774, Sept 76, 20pp.
Predicting Estuarine Salinity from River Inflows, James A. Harder, Preprint No.2674, Apr 76, 23pp.
Predicting Material Transportation in Mobile Bay, Gary C. April, Samuel Ng, Hua-An Liu and Donald O. Hill, DIEE:Jan 76:833
Salinity Control and Federal Water Quality Act, Michael B. Bessler and John T. Maletic, HY5:May 75:581:11321
Salinity Induced Horizontal Estuarine Circulation, Brady A. Elliott and Robert O. Reid, WW4:Nov 76:425:12550
Salinity Intrusion Mechanisms in Estuaries, John M. Hamrick, OE75:June 75:1382
Salinity Policy for Colorado River Basin, Gaylord V. Skogerboe and Wynn R. Walker, HY8:Aug 75: 1067:11510
Shooting Models for Salinity and Coliform, Benjamin J. Olufeagba and Robert H. Flake, EE1:Feb 76:95: 11939
Significance of Water Quality to Water Resources, Vernon E. Valantine, Preprint No.2673, Apr 76, 13pp.
A Stochastic Approach to the Colorado River Basin, William L. Lane, Albert E. Gibbs and Robert B. Main, Preprint No.2684, Apr 76, 26pp.

Salt
Concepts in the Control of Nonpoint Water Pollution, M. H. Frere, David A. Woolhiser, J. H. Caro, B. A. Stewart and W. H. Wischmeier, Preprint No.2667, Apr 76, 24pp.

Salt Balance
Irrigation Management for Salt Control, Jan van Schilfgaarde, Leon Bernstein, James D. Rhoades and Stephen L. Rawlins, IR3:Sept 74:321:10822

Salts
Practical Proposal for Restoring Manhattan's West Side Highway, Robert Moses, CE:Nov 75:49
Salt Storage and Runoff in Urban Watershed, Richard H. Hawkins, EE4:Aug 76:737:12292

Salts Effects
Practical Proposal for Restoring Manhattan's West Side Highway, Robert Moses, CE:Nov 75:49

Salt Tolerance
Irrigation Management for Salt Control, Jan van Schilfgaarde, Leon Bernstein, James D. Rhoades and Stephen L. Rawlins, IR3:Sept 74:321:10822
Salt Damaged Bridge Decks: Cathodic Helps, Virginia Fairweather, CE:Sept 75:88

Salt Water
Control of Salt-Water Intrusion by Recharge Wells, Abdel-Aziz I. Kashef, IR4:Dec 76:445:12617

Salt Water Barriers
Control of Salt-Water Intrusion by Recharge Wells, Abdel-Aziz I. Kashef, IR4:Dec 76:445:12617

Salt Water Intrusion
Control of Salt-Water Intrusion by Recharge Wells, Abdel-Aziz I. Kashef, IR4:Dec 76:445:12617
Significance of Water Quality to Water Resources, Vernon E. Valantine, Preprint No.2673, Apr 76, 13pp.

Samplers
Evaluation of a Bedload Sediment Sampler for USA-Canada Watershed Studies, Thomas F. Zimmie, Young S. Paik and Carsten H.L. Floess, IR76:July 76:40
New Diver-Operated Bedload Sampler, Dennis G. Waslenchuk, HY6:June 76:747:12179
Optimization of Urban Air Monitoring Networks, William P. Darby, Paul J. Ossenbruggen and Constantine J. Gregory, EE3:June 74:577:10577

Samples
Bayesian Approach to Tile Drain Design, Andre Musy .and Lucien Duckstein, IR3:Sept 76:317: 12390
Investigation of the Elutriate Test, Thomas P. O'Connor, DIEE:Jan 76:299
Lead Analysis in Dredge Spoil Elutriates, Walter G. Cox, DIEE:Jan 76:242
Optimization of Urban Air Monitoring Networks, William P. Darby, Paul J. Ossenbruggen and Constantine J. Gregory, EE3:June 74:577:10577
Sedimentation Rates in the Upper Mississippi River, J. Roger McHenry, Jerry C. Ritchie and John Verdon, WW76:Aug 76:1339
Specimen Preparation and Cyclic Stability of Sands, Richard S. Ladd, Preprint No.2752, Sept 76, 28pp.

Sampling
Bedload Sampling by Pumping, H. I. Langley, WW76:Aug 76:945
Evaluation of a Bedload Sediment Sampler for USA-Canada Watershed Studies, Thomas F. Zimmie, Young S. Paik and Carsten H.L. Floess, IR76:July 76:40
Lead Analysis in Dredge Spoil Elutriates, Walter G. Cox, DIEE:Jan 76:242
Monitoring Sludge Disposal — Mid-Atlantic Shelf, Geraldine V. Cox, Steven A. Townsend and Priya Wickramarante, OE75:June 75:1314
New Diver-Operated Bedload Sampler, Dennis G. Waslenchuk, HY6:June 76:747:12179
Optimization of Urban Air Monitoring Networks, William P. Darby, Paul J. Ossenbruggen and Constantine J. Gregory, EE3:June 74:577:10577
Sedimentation Rates in the Upper Mississippi River, J. Roger McHenry, Jerry C. Ritchie and John Verdon, WW76:Aug 76:1339
Sediment Discharge by Glacier-Fed Rivers in Alaska, Craig H. Everts, WW76:Aug 76:907
Specimen Prepafation and Cyclic Stability of Sands, Richard S. Ladd, Preprint No.2752, Sept 76, 28pp.
Uniform Placement of Sand, Wayne A. Bieganousky and William F. Marcuson, III, GT3:Mar 76:229: 11985
Variation of Suspended Sediment in Sand Bed Canals, Gary L. Eyster and Khalid Mahmood, WW76:Aug 76:924
Virus Sampling in Wastewater—Field Experiences, Robert P. Miele and Michael W. Selna, Preprint No.2724, Apr 76, 30pp.

Samuel Arnold Greeley Award
Landfill Disposal of Liquid Sewage Sludge, Ralph Stone, EE1:Feb 75:91:11112

1976 Samuel A. Greeley Award Presented to Ralph Stone, CE:Oct 76:101

Sand

Endochronic Constitutive Law for Liquefaction of Sand, Zdenek P. Bazant and Raymond J. Krizek, EM2:Apr 76:225:12036

Saturated Sand as Inelastic Two-Phase Medium, Zdenek P. Bazant and Raymond J. Krizek, EM4: Aug 75:317:11508

Sand Filters

Intermittent Sand Filtration of Household Wastewater, David K. Sauer, William C. Boyle and Richard J. Otis, EE4:Aug 76:789:12295

Sands

Acoustic Emission Behavior of Granular Soils, Robert M. Koerner, Arthur E. Lord, Jr., W. Martin McCabe and John W. Curran, GT7:July 76:761: 12239

Analysis of Offshore Concrete Caisson Dikes under Cyclic Loading, John T. Christian and Jean M.E. Audibert, NMG:June 76:II-979

Behavior of Bored Piles in Sand, Fadlo T. Touma and Lymon C. Reese, GT7:July 74:749:10651

Cavity Expansion in Sands with Curved Envelopes, Mohsen M. Baligh, GT11:Nov 76:1131:12536

Consolidation Settlement of a Layered Subsurface, Surendra K. Saxena, Chandrakant S. Desai and Jayant Vir, NMG:June 76:II-1082

Currents and Sand Transport on Beaches: A Review, Paul D. Komar, Preprint No.2707, Apr 76, 27pp.

Cyclic Triaxial Strength of Standard Test Sand, Marshall L. Silver, Clarence K. Chan, Richard S. Ladd, Kenneth L. Lee, Drew A. Tiedemann, Frank C. Townsend, Julio E. Valera and James H. Wilson, GT5:May 76:511:12145

Dynamic Triaxial and Simple Shear Behavior of Sand, Ted K. Park and Marshall L. Silver, GT6: June 75:513:11347

An Effective Stress Model for Liquefaction, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, Preprint No.2752, Sept 76, 30pp.

Elasto-Plastic Finite Element Analyses of Sand Deformations, Yoshio Ozawa and James M. Duncan, NMG:June 76:I-243

Evaluation of Resonant Column Test Devices, George R. Skoglund, William F. Marcuson, III and Robert W. Cunny, GT11:Nov 76:1147:12567

Evaluation of Three Stress-Strain Models for Soils, Jean-Marie J. Vagneron, Poul V. Lade and Kenneth L. Lee, NMG:June 76:III-1329

Factors Affecting Liquefaction and Cyclic Mobility, Gonzalo Castro Salas and Steve J. Poulos, Preprint No.2752, Sept 76, 34pp.

Foundation Considerations for a Nuclear Power Plant, George A. Faillace, CO1:Mar 75:165:11181

Hydraulic and Environmental Effects of Commercial In-Stream Dredging, Paul G. Mayer, DIEE:Jan 76: 947

Incremental Stress-Strain Relationship for Cohesionless Soil, F. Darve, S. Labanieh and R. Chambon, NMG:June 76:I-264

Influence of Equivalent Sand Roughness on the Dispersion Coefficient in Laboratory and Natural Streams, Ho-Shong Hou and Bent A. Christensen, WW76:Aug 76:1179

Interpretation of Torsion Shear Tests on Sand, Poul V. Lade, NMG:June 76:I-381

Laboratory Standard Penetration Tests on Fine Sands, William F. Marcuson, III and Wayne A. Bieganousky, Preprint No.2752, Sept 76, 30pp.

Large-Scale Model Test of Drilled Pier in Sand, Samuel P. Clemence and William F. Brumund, GT6:June 75:537:11369

Laterally Loaded Pipe Pile in Cohesionless Soil, Helmut E. Meissner, NMG:June 76:III-1353

Liquefaction and Cyclic Mobility of Saturated Sands, Gonzalo Castro Salas, GT6:June 75:551:11388

Liquefaction Potential at Ekotisk Tank in North Sea, Kenneth L. Lee and John A Focht, Jr., GT1:Jan 75:1:11054

Longshore Currents and Sand Transport on Beaches, Paul D. Komar, OE75:June 75:334

Marine Sediment Pollution Study by Electric Conductivity Method, Mian-Chang Wang, David H. Killoy and Vito A. Nacci, Preprint No.2664, Apr 76, 19pp.

New Method for Beach Erosion Control, Jerry L. Machemehl, Thomas J. French and Norden E. Huang, OE75:June 75:142

Nonlinear Characterization and Analysis of Sand, Hon-Yim Ko and Raymond M. Masson, NMG: June 76:I-294

Numerical Design-Analysis for Piles in Sands, Chandrakant S. Desai, GT6:June 74:613:10617

On an Improved Application of Kotter's Equation, Hakuju Yamaguchi, Tsutomu Kimura and Nariaki Fuji-i, NMG:June 76:I-183

On Constitutive Laws for Soils and Rocks, Gerd Gudehus, NMG:June 76:III-1305

Placing Artificial Beach Nourishment, J. William Kamphuis and S. G. Bridgeman, OE75:June 75:197

Predicting Deformation in the Fort Union Formation, Van A. Silver, Samuel P. Clemence and Richard W. Stephenson, GT76:Aug 76:13

Response of Footings on Micaceous, Cohesionless Soils, Jean M.E. Audibert, Nabil F. Ismael and G. Wayne Clough, NMG:June 76:I-567

Safety Factor Evaluation for Single Piles in Sand, James Neil Kay, GT10:Oct 76:1093:12494

Sand Liquefaction in Large-Scale Simple Shear Tests, Pedro De Alba, H. Bolton Seed and Clarence K. Chan, GT9:Sept 76:909:12403

Saturated Sand and Cyclic Dynamic Tests, Y. Cho, Paul C. Rizzo and Wilfred K. Humphries, Preprint No.2752, Sept 76, 28pp.

Sediment Transport Study, Offshore, New Jersey, Joseph T. DeAlteris, James R. Roney, Lloyd E. Stahl and Chris Carr, OE75:June 75:225

Settlement of Building on Pile Foundation in Sand, Robert M. Koerner and Antal Partos, GT3:Mar 74: 265:10405

Settlement of Sands under Multidirectional Shaking, Robert M. Pyke, H. Bolton Seed and Clarence K. Chan, GT4:Apr 75:379:11251

Side Friction in Model Retaining-Wall Experiment, Peter L. Bransby and Ian A.A. Smith, GT7:July 75: 615:11447

Specimen Preparation and Cyclic Stability of Sands, Richard S. Ladd, Preprint No.2752, Sept 76, 28pp.

Stress-Strain Behavior of Sand, Vijay K. Khosla and Tien H. Wu, GT4:Apr 76:303:12079

Sulfur-Asphalt Mixtures Using Poorly Graded Sands, Don Saylak, Bob M. Gallaway, Jon A. Epps and Haffizudin Ahmid, TE1:Feb 75:97:11106

Underwater Placement of Sand Fill at Port of Portland Terminal #6, Loren R. Anderson and John Ramage, Preprint No.2718, Apr 76, 20pp.

Uniform Placement of Sand, Wayne A. Bieganousky and William F. Marcuson, III, GT3:Mar 76:229: 11985

Uplift Capacity of Group Piles in Sand, Braja M. Das, Gerald R. Seeley and Jonathan E. Smith, TN: GT3:Mar 76:282:11953

Uplift Resistance of Piles in Sand, Ibrahim H. Sulaiman and Harry M. Coyle, TN: GT5:May 76: 559:12127

Variation of Suspended Sediment in Sand Bed Canals, Gary L. Eyster and Khalid Mahmood, WW76:Aug 76:924

Vibroflotation and Terra-Probe Comparison, Ralph E. Brown and Andrew J. Glenn, GT10:Oct 76:1059: 12498

Yielding of Sand in Plane Strain, Sam Frydman, GT5:May 74:491:10540

Sandstones

On Constitutive Laws for Soils and Rocks, Gerd Gudehus, NMG:June 76:III-1305

Sandwich Panels

Analysis of Sandwich Panels with Formed Faces, John A. Hartsock and Ken P. Chong, ST4:Apr 76: 803:12058

Axial Compression of Formed-Faced Sandwich Panels, Ken P. Chong, Pei-Chung Liu and Kjell Oistein Engen, Preprint No.2807, Sept 76, 22pp.

Sandwich Structures
Minimum Reinforcement of Nonuniform Plates, Robert E. Melchers, EM6:Dec 76:943:12618
Optimally Reinforced Axisymmetric Plates, Robert E. Melchers, EM2:Apr 75:143:11258

San Francisco
California Coastal Commission Accepts Advice from ASCE on Earthquake Design Controversy, Samuel H. Clark, CE:May 76:85
Port of San Francisco, Robert L. Sloan, Preprint No.2783, Sept 76, 26pp.
Tunnel Survey and Tunneling Machine Control, Edward W. Peterson and Peter Frobenius, SU1:Sept 73:21:10008

Sanitary Engineering
Benjamin Latrobe: Helping Cleanse America, CE:July 76:80
Design and Operation Model of Activated Sludge, Joseph H. Sherrard and Alonzo W. Lawrence, EE6:Dec 73:773:10220
Design Optimization for Biological Filter Models, Harold B. Gotaas and William S. Galler, EE6:Dec 73:831:10191
George Waring: Giving Sanitation Status, CE:July 76:81
Highlights of San Diego Convention, CE:June 76:67
Legal Perspective on Water Quality Management, Douglas R. Blazey, HY5:May 75:595:11320
"Manual of Engineering Practice on Sanitary Landfill," by the ASCE Solid Waste Management Committee of the Environmental Engineering Division (Book Review), Frank J. Humenik, CE:Aug 76:34
Sewage Chlorination Versus Toxicity -- A Dilemma?, Harvey F. Collins and David G. Deaner, EE6:Dec 73:761:10190

Sanitary Landfill
Control of Gas Flow from Sanitary Landfills, Houshang Esmaili, EE4:Aug 75:555:11525
County Treats Shredfill Leachate, Otto Vydra and Alfred Grimm, CE:Dec 76:55
Energy-Wastewater Treatment and Solids Disposal, William F. Garber, George T. Ohara and Sagar K. Raksit, EE3:June 75:319:11357
Future of Sanitary Landfill, Bruce Thompson and Iraj Zandi, EE1:Feb 75:41:11113
Ground-Water Pollution Near a Landfill, William E. Kelly, EE6:Dec 76:1189:12609
Ground-Water's Role in Water Quality Management, John O. Osgood, HY3:Mar 75:517:11159
"Manual of Engineering Practice on Sanitary Landfill," by the ASCE Solid Waste Management Committee of the Environmental Engineering Division (Book Review), Frank J. Humenik, CE:Aug 76:34
Proposed Standards: Land Disposal of Effluents, John V. Betz, CE:May 75:77
Sanitary Landfill Leachates and Their Leachate Treatment, Edward S.K. Chian and Poppe B. DeWalle, EE2:Apr 76:411:12033
Sanitary Landfill Settlement Rates, Bing C. Yen, GT5:May 75:475:11335

Sanitary Sewers
Austin's 11-Mile Sewer Tunnel Reflects Sound Economic, Environmental Alternatives, Albert M. Eldridge, CE:Aug 76:52
Storm Water Management for the Merivale Industrial Area — Township of Nepean, J. C. Anderson, IR76:July 76:593

Satellites
Satellites Helping Solve Some Down-to-Earth Civil Engineering Problems, CE:Aug 75:49

Satellites (Artificial)
Instability Mechanisms for Rotating Appendages, John O. Dow and Chuan C. Feng, Preprint No.2801, Sept 76, 27pp.
Satellite Measurements of Turbidity of Coastal Waters, Edward Yost, OE75:June 75:1170
Surface Currents in the Arctic and Sub-Arctic Seas as Deduced from Satellite Photographs of Ice Floes, Paul E. La Violette, OE75:June 75:1166
Surveying-Mapping Research from Earth Satellites, Charles K. Paul, SU1:Oct 75:27:11628

Saturated Flow
Saturated and Unsaturated Flow to Parallel Drains, R. Wayne Skaggs and Yau-K. Tang, IR2:June 76:221:12199

Saturated Soils
Comparison of Methods for Liquefaction Evaluation, Julio E. Valera and Neville C. Donovan, Preprint No.2752, Sept 76, 30pp.
Endochronic Constitutive Law for Liquefaction of Sand, Zdenek P. Bazant and Raymond J. Krizek, EM2:Apr 76:225:12036
Liquefaction and Cyclic Mobility of Saturated Sands, Gonzalo Castro Salas, GT6:June 75:551:11388
Non-Linear Flow and Deformation Analysis of Consolidated Problems, Roland W. Lewis, G. W. Roberts and Olgierd C. Zienkiewicz, NMG:June 76:II-1106
On Constitutive Laws for Soils and Rocks, Gerd Gudehus, NMG:June 76:III-1305
Saturated Sand and Cyclic Dynamic Tests, Y. Cho, Paul C. Rizzo and Wilfred K. Humphries, Preprint No.2752, Sept 76, 28pp.
Saturated Sand as Inelastic Two-Phase Medium, Zdenek P. Bazant and Raymond J. Krizek, EM4:Aug 75:317:11508
Testing Procedure Effects on Dynamic Soil Behavior, Marshall L. Silver and Ted K. Park, GT10:Oct 75:1061:11671

Scale Effect
Assessment of Galveston Entrance Movable-Bed Model, William H. McAnnaly, Jr. and Joseph V. Letter, Jr., Preprint No.2661, Apr 76, 27pp.
Attitudinal Variables in Civil Engineering Design, Wilfred W. Recker and George C. Lee, EI1:Jan 76:55:11862
An Investigation of the Effective Width of the Reinforced Concrete T-Beam, Gajanan M. Sabnis and William D. Lord, Preprint No.2746, Sept 76, 30pp.
Masjid (Mosque) Planning, Altaf Hussain, UP1:Aug 76:171:12348
A Model Study of St. Marys River Ice Navigation, James E. Cowley, J. W. Hayden and William W. Willis, WW76:Aug 76:1610
Sediment Control at Streamside Power Plants, Gary L. Lewis and Ralph R. Marlette, WW76:Aug 76:1592
Shear Strength of Two-Way Bridge Slabs, Barrington deV. Batchelor and Ian R. Tissington, ST12:Dec 76:2315:12604
Similitude in Coastal Engineering, Bernard Le Mehaute, WW3:Aug 76:317:12293

Scale Models
Similitude in Coastal Engineering, Bernard Le Mehaute, WW3:Aug 76:317:12293

Scanning
Side Scan Sonar Views of Channel Disturbances Associated with Marine Traffic and Dredging, Larry S. Slotta, DIEE:Jan 76:226

Scheduling
Construction Cash Flow Management System, Kenneth F. Reinschmidt and Walter E. Frank, CO4:Dec 76:615:12610
Developments in CPM, PERT, and Network Analysis, Calin Popescu and John D. Borcherding, CO4:Dec 75:769:11763

Effects of Irrigation Scheduling and Coordinated Delivery on Irrigation and Drainage Systems, Roy D. Gear, Arnold S. Dransfield and Melvin D. Campbell, Preprint No.2720, Apr 76, 18pp.
Engineering Scheduling with Manpower Allocation, Jerome P. Miller, Jr., EI2:Apr 75:107:11255
Irrigation Timetable Combined with Optimal Operating of an Agricultural Production System, Ilan Amir, Y. Friedman, S. Sharon and A. Ben David, IR76:July 76:192
Productivity Improvements Achieved in Navy Public Works Operations, Albert R. Marschall, PROD: Aug 76:135

Schist
Foundation of the Sirikit Powerhouse, James D. Gill and Leib Wolofsky, GT76:Aug 76:82

Scholarships
Recruiting, Scholarship and Work Programs Involving Women and Minority Engineering Students at New Mexico State University, John W. Hernandez and Roger M. Zimmerman, Preprint No.2796, Sept 76, 10pp.

School Crossing Protection
Young Pedestrian Safety (The School Walking Trip), Martin L. Reiss and H. Douglas Robertson, BP75: Dec 75:389

School Safety Patrols
Young Pedestrian Safety (The School Walking Trip), Martin L. Reiss and H. Douglas Robertson, BP75: Dec 75:389

Scientific Method
Address at Ocean Engineering III, Paul Atkinson, OE75:June 75:1476

Scour
Experience with the Offset Surfaces Breakwater, E. Douglas Sethness, Jr., Walter L. Moore and James E. Dailey, OE75:June 75:677
Flow and Bed Topography in Curved Open Channels, Hideo Kikkawa, Syunsuke Ikeda and Akira Kitagawa, HY9:Sept 76:1327:12416
Mild Slope Stable Channels — A Stochastic Design Approach, Bent A. Christensen, Preprint No.2680, Apr 76, 14pp.
Scour Holes in a Wandering Gravel River, Charles R. Neill, WW76:Aug 76:1301

Scouring
New Method for Beach Erosion Control, Jerry L. Machemehl, Thomas J. French and Norden E. Huang, OE75:June 75:142
Scour Holes in a Wandering Gravel River, Charles R. Neill, WW76:Aug 76:1301

Screeds
Concrete Replaces Steel in Offshore Coal-Loading Terminal, A. G.F. Eddie, CE:Apr 76:60

Sea Grasses
Transplanting Maritime Plants to Dredged Material in Mississippi Waters, Lionel H. Eleuterius and Hugh A. McClellan, DIEE:Jan 76:900

Sea Ice
Thermal Analysis of Frozen Embankment Islands, Guy R. Bafus and Gary L. Guymon, WW2:May 76:123:12139

Sealing
Discs Reduce Manhole Infiltration, Warren S. O'Sullivan, CE:Aug 75:77
Tunnel and Shaft Sealing Methods Using Polyvinyl Chloride Sheet, Antonio Peduzzi, CO1:Mar 76:111: 11966

Seasonal Variations
Seasonal Effects on Building Construction, David Morris, CO1:Mar 76:29:11989

Sea Walls
Parameters Affecting Stability of Rubble Mounds, Per Moller Bruun and Palmi Johannesson, WW2: May 76:141:12136

Sea Water
The Corrosion of Coated Steel Piles in the Ocean, E. Escalante, W. P. Iverson and W. F. Gerhold, Preprint No.2733, Apr 76, 22pp.
Durability of Concrete in Seawater, Povindar K. Mehta and Harvey H. Haynes, ST8:Aug 75:1679: 11516
Energy-Wastewater Treatment and Solids Disposal, William F. Garber, George T. Ohara and Sagar K. Raksit, EE3:June 75:319:11357

Secondary Compression
Consolidation of Fibrous Peat, Peter L. Berry and Brian Vickers, GT8:Aug 75:741:11493
Stress-Deformation-Time Behavior of Dredgings, Abdelsalam M. Salem and Raymond J. Krizek, GT2:Feb 76:139:11917

Secondary Flow
Flow and Bed Topography in Curved Open Channels, Hideo Kikkawa, Syunsuke Ikeda and Akira Kitagawa, HY9:Sept 76:1327:12416

Sediment
Chemical Reactions During Disposal Operations, Thomas H. Wakeman and Calvin C. Fong, Preprint No.2712, Apr 76, 18pp.
Concepts in the Control of Nonpoint Water Pollution, M. H. Frere, David A. Woolhiser, J. H. Caro, B. A. Stewart and W. H. Wischmeier, Preprint No.2667, Apr 76, 24pp.
Evaluation of a Bedload Sediment Sampler for USA-Canada Watershed Studies, Thomas F. Zimmie, Young S. Paik and Carsten H.L. Floess, IR76:July 76:40
Marine Sediment Pollution Study by Electric Conductivity Method, Mian-Chang Wang, David H. Killoy and Vito A. Nacci, Preprint No.2664, Apr 76, 19pp.
Sediment Inertia as Cause of River Antidunes, Gary Parker, HY2:Feb 75:211:11127
Sediment Transport in Smooth Fixed Bed Channels, Pavel Novak and Chandramouli Nalluri, HY9:Sept 75:1139:11556

Sedimentary Petrology
Sea Cliff Base Erosion, San Diego, California, Louis J. Lee, Charles Pinckney and Charles Bemis, Preprint No.2708, Apr 76, 14pp.

Sedimentation
Assessment of Galveston Entrance Movable-Bed Model, William H. McAnnaly, Jr. and Joseph V. Letter, Jr., Preprint No.2661, Apr 76, 27pp.
Bed Form Response to Nonsteady Flows, D. Michael Gee, HY3:Mar 75:437:11195
Boundary Layer Separation Concept of Settling Tanks, Yishu Chiu, EE6:Dec 74:1213:11019
Column Settling Tests for Flocculant Suspensions, Alphonse E. Zanoni and Marshall W. Blomquist, EE3:June 75:309:11356
Deposition and Erosion in the Dredge Spoil and Other New York Bight Dumping Areas, George L. Freeland and George F. Merrill, DIEE:Jan 76:936
Design Graphs for Activated Sludge Process, Michael D. Mynhier and C. P.Leslie Grady, Jr., EE5:Oct 75:829:11659
Detrimental Effects of River Channelization, Gary Parker and David Andres, WW76:Aug 76:1248
Dredging and the Environmental Policy Act of 1969, James H. Bradley, DIEE:Jan 76:39
Dredging and the National Environmental Policy Act of1969, James H. Bradley, Preprint No.2734, Apr 76, 16pp.
Dynamic Behavior Model of Ephemeral Stream, Kenneth G. Renard and Emmett M. Laursen, HY5: May 75:511:11315

Effects of Meandering in Alluvial Streams, Yasuo Onishi, Subhash C. Jain and John F. Kennedy, HY7:July 76:899:12248
Extended Plain Sedimentation, Kuan M. Yao, EE3: June 75:413:11392
Factors Determining Bed Forms of Alluvial Streams, Vito A. Vanoni, HY3:Mar 74:363:10396
Flow and Bed Topography in Channel Bends, Frank Engelund, HY11:Nov 74:1631:10963
Hydraulic and Environmental Effects of Commercial In-Stream Dredging, Paul G. Mayer, DIEE:Jan 76: 947
Hydraulics of Slope Erosion by Overland Flow, Saburo Komura, HY10:Oct 76:1573:12489
Laboratory Study of the Turbidity Generation Potential of Clay Mixtures, David R. Cogley, Barry A. Wechsler and Ralph D'Agostino, DIEE:Jan 76: 964
Maintenance Dredging on the Arkansas River, Tasso Schmidgall, WW76:Aug 76:459
Marine Soil Mechanics and Foundations II, State-of-the-Art Summary, Anton L. Inderbitzen, OE75: June 75:486
Methodology for Sedimentation and Water Quality Modelling at the Humber River Mouth, Michael R. Garrett, A. Harrington, Nicholas Kouwen, A. F. Roake and Paul E. Wisner, WW76:Aug 76:650
Mobility of Trace Metals during Open Water Disposal of Dredged Material and Following Resedimentation, Kenneth Y. Chen, James C.S. Lu and Amancio Z. Sycip, DIEE:Jan 76:435
A Model for Trace Metals from Marine Outfalls, T. J. Hendricks, OE75:June 75:1353
New Method for Beach Erosion Control, Jerry L. Machemehl, Thomas J. French and Norden E. Huang, OE75:June 75:142
Nonequilibriun River Form, Michael A. Stevens, Daryl B. Simons and Everett V. Richardson, HY5: May 75:557:11334
Nonpoint Sources of Pollution: A Federal Perspective, Mark A. Pisano, EE3:June 76:555: 12211
Photographic Remote Sensing of Bolinas Lagoon, California, Douglas M. Pirie and Michael J. Murphy, Preprint No.2647, Apr 76, 17pp.
The Port of Philadelphia — Past and Present, Clarence F. Wicker, Preprint No.2774, Sept 76, 20pp.
River-Ice Problems: A State-of-the-Art Survey and Assessment of Research Needs, John F. Kennedy, Cochmn. and George D. Ashton, Cochmn., HY1: Jan 74:1:10281
"Sedimentation Engineering," Manual and Report on Engineering Practice No. 54, ed. by Vito A. Vanoni (Book Review), Daryl B. Simons, CE:Mar 76:34
Sedimentation Rates in the Upper Mississippi River, J. Roger McHenry, Jerry C. Ritchie and John Verdon, WW76:Aug 76:1339
Sediment Control during Highway Construction in Central Pennsylvania, Lloyd A. Reed, IR76:July 76: 497
Sediment Flushing after Dredging in Tidal Bays, Klas Cederwall and Torbjorn Svensson, HY7:July 76: 935:12229
Sediment Transport in a South Carolina Mountain Stream, Benjamin C. Dysart, III and Charles H. Langdon, III, IR76:July 76:56
Shoaling Rate Prediction Using a Sedimentation Tank, Craig H. Everts, OE75:June 75:294
Side Scan Sonar Views of Channel Disturbances Associated with Marine Traffic and Dredging, Larry S. Slotta, DIEE:Jan 76:226
Soil Erosion and Sediment Transport from Gullies, Robert F. Piest, Joe M. Bradford and George M. Wyatt, HY1:Jan 75:65:11069
Stochastic Analysis of Dune Bed Profiles, Baum K. Lee and Harvey E. Jobson, HY7:July 74:849:10657
A Study of the Effects of Maintenance Dredging on Selected Ecological Parameters in the Gulfport Ship Channel, Gulfport, Mississippi, Joseph W. Markey and Hugh D. Putnam, DIEE:Jan 76:821
Suspended Sediment in Chesapeake Bay, J. R. Schubel, OE75:June 75:245
The Yellow River: Its Unique Features and Serious Problems, Tsung-Lien Chou, WW76:Aug 76:507

Sediment Concentration

Dynamic Response of Settling Basins, Sadataka Shiba and Yoriteru Inoue, EE5:Oct 75:741:11609

Sediment Control

Sediment Control at Streamside Power Plants, Gary L. Lewis and Ralph R. Marlette, WW76:Aug 76: 1592
Sediment Control during Highway Construction in Central Pennsylvania, Lloyd A. Reed, IR76:July 76: 497
Sediment Runoff During Highway Construction, William G. Weber, Jr. and Lloyd A. Reed, CE:Mar 76:76

Sediment Deposits

Deposition and Erosion in the Dredge Spoil and Other New York Bight Dumping Areas, George L. Freeland and George F. Merrill, DIEE:Jan 76:936
Economic Value of Dredged Material, Wyndham J. Roberts, DIEE:Jan 76:919
Evaluation of the Factors Influencing the Results of the Elutriate Test for Dredged Material Disposal Criteria, G. Fred Lee, Jose M. Lopez and M. D. Piwoni, DIEE:Jan 76:253
A Geomorphic Study of Pool 25 in the Upper Mississippi River, Michael A. Stevens, Stanley A. Schumm and Daryl B. Simons, WW76:Aug 76:1655
Hans A. Einstein's Contributions in Sedimentation, Hsieh W. Shen, HY5:May 75:469:11290
Investigation of the Elutriate Test, Thomas P. O'Connor, DIEE:Jan 76:299
Recent Techniques in Water Diversion, Fuat Senturk, WW76:Aug 76:1476
Remote Classification of Marine Sediments, Arthur S. Westneat, DIEE:Jan 76:289
Sedimentation Rates in the Upper Mississippi River, J. Roger McHenry, Jerry C. Ritchie and John Verdon, WW76:Aug 76:1339
Side Scan Sonar Views of Channel Disturbances Associated with Marine Traffic and Dredging, Larry S. Slotta, DIEE:Jan 76:226

Sediment Discharge

Sediment Discharge by Glacier-Fed Rivers in Alaska, Craig H. Everts, WW76:Aug 76:907
Stochastic Characteristics of Sediment Motions, Hin Fatt Cheong and Hsieh W. Shen, HY7:July 76: 1035:12269

Sediment Distribution

Predicting Material Transportation in Mobile Bay, Gary C. April, Samuel Ng, Hua-An Liu and Donald O. Hill, DIEE:Jan 76:833

Sediment Load

Response of the Mississippi River to the Cutoffs, Brien R. Winkley, WW76:Aug 76:1267
Sediment Transport in a South Carolina Mountain Stream, Benjamin C. Dysart, III and Charles H. Langdon, III, IR76:July 76:56
Sediment Transport Study, Offshore, New Jersey, Joseph T. DeAlteris, James R. Roney, Lloyd E. Stahl and Chris Carr, OE75:June 75:225
Suspended Sediment in Chesapeake Bay, J. R. Schubel, OE75:June 75:245

Sediments

Analysis of Oxygen Demand of Sediments, J. Clement Burdick, III, DIEE:Jan 76:319
Compressibility of Undisturbed Submarine Sediments, William F. Brumund and Gordon W. Callender, Jr., OE75:June 75:363
Controlling Runoff from Construction Sites, Eugene E. Dallaire, CE:Oct 76:73
Distribution of Toxic Heavy Metals in Marine and Freshwater Sediments, J. M. Brannon, R. M. Engler, J. R. Rose, P. G. Hunt and I. Smith, DIEE: Jan 76:455

Dredged Material Confinement Facilities as Solid-Liquid Separation Systems, Raymond J. Krizek, Joseph A. FitzPatrick and Dimitrios K. Atmatzidis, DIEE:Jan 76:609
Dynamic Behavior Model of Ephemeral Stream, Kenneth G. Renard and Emmett M. Laursen, HY5: May 75:511:11315
Economic Value of Dredged Material, Wyndham J. Roberts, DIEE:Jan 76:919
Engineering Challenges of Dredged Material Disposal, Robert M. Meccia, William C. Allanach and Fletcher H. Griffis, WW1:Feb 75:1:11096
Estimation of Washload Produced on Certain Small Watersheds, Oswald Rendon-Herrero, HY7:July 74: 835:10638
Evaluation of the Factors Influencing the Results of the Elutriate Test for Dredged Material Disposal Criteria, G. Fred Lee, Jose M. Lopez and M. D. Piwoni, DIEE:Jan 76:253
Evaluation Strategies of Metal Pollution in Oceans, Kenneth Y. Chen and R. Addis Lockwood, EE2: Apr 76:347:12023
Finite Element Model for Cohesive Sediment Transport, Ranjan Ariathurai and Ray B. Krone, HY3:Mar 76:323:11987
Impact on Marine Benthos of Waste Water Discharge, Gerald T. Orlob and Dennis A. O'Leary, Preprint No.2658, Apr 76, 25pp.
Maintenance Dredging and Four Polychaete Worms, James E. McCauley, Danil R. Hancock and Robert A. Parr, DIEE:Jan 76:673
Marine Soil Mechanics and Foundations II, State-of-the-Art Summary, Anton L. Inderbitzen, OE75: June 75:486
Mechanical Dredges, Adolph W. Mohr, DIEE:Jan 76:125
New Diver-Operated Bedload Sampler, Dennis G. Waslenchuk, HY6:June 76:747:12179
Phosphate Release and Sorption by Lake Mohegan Sediments, John Fillos and Hiranmay Biswas, EE2: Apr 76:239:12029
Physicochemical Parameters that Regulate Mobilization and Immobilization of Toxic Heavy Metals, Robert P. Gambrell, Rashid A. Khalid and W. H. Patrick, Jr., DIEE:Jan 76:418
Regional Sediment Yield Analysis of Alaska Streams, Gary L. Guymon, HY1:Jan 74:41:10255
Remote Sensing of Mississippi River Characteristics, James F. Ruff, Morris M. Skinner, Brien R. Winkley, Daryl B. Simons and Dennis E. Dorratcague, WW2:May 76:189:12150
Sediment and Elutriate Toxicity to Oyster Larvae, Rick D. Cardwell, Charles E. Woelke, Mark I. Carr and Eugene W. Sanborn, DIEE:Jan 76:684
"Sedimentation Engineering," Manual and Report on Engineering Practice No. 54, ed. by Vito A. Vanoni (Book Review), Daryl B. Simons, CE:Mar 76:34
Sediment Movement in Tubbs Inlet, North Carolina, Jerry L. Machemehl, Robert P. Masterson, Jr. and Victor V. Cavaroc, Jr., OE75:June 75:313
Sediment Transport Study, Offshore, New Jersey, Joseph T. DeAlteris, James R. Roney, Lloyd E. Stahl and Chris Carr, OE75:June 75:225
Simulation of Hydraulic Processes in Open Channels, Chao-Lin Chiu, Hsin-Chi Lin and Kazumasa Mizumura, HY2:Feb 76:185:11905
Stability of Offshore Pipe in Cohesive Sediment, Osman I. Ghazzaly, Leland M. Kraft, Jr. and S. J. Lim, OE75:June 75:490
Stochastic Models of Sediment Motion on Flat Bed, Che S. Hung and Hsieh W. Shen, HY12:Dec 76: 1745:12639
Urban Sediment Problems: A Statement on Scope, Research, Legislation and Education, Harold P. Guy, Chmn., HY4:Apr 75:329:11256
Water Quality and Aquitard Permeability, James H. Hardcastle and James K. Mitchell, IR2:June 76: 205:12203

Sediment Transport

Analysis of Bed Profiles in Sand Bed Canals, Khalid Mahmood and Hassan Ahmadi-Karvigh, WW76: Aug 76:564
Applicability of Unit Stream Power Equation, Chih Ted Yang and John B. Stall, HY5:May 76:559: 12103
Autogeometry of Semi-Arid Channel Systems, John Barrie Thornes, WW76:Aug 76:1715
Automated Wet Sand Feeder for Open-Circuit Flumes, Michael G. Foley and Elton F. Daly, TN: HY1:Jan 76:136:11820
Bedload Sampling by Pumping, H. I. Langley, WW76:Aug 76:945
Controlling Runoff from Construction Sites, Eugene E. Dallaire, CE:Oct 76:73
Currents and Sand Transport on Beaches: A Review, Paul D. Komar, Preprint No.2707, Apr 76, 27pp.
Detrimental Effects of River Channelization, Gary Parker and David Andres, WW76:Aug 76:1248
Elutriation of Dredge Material in New Orleans Harbor, Charles Grimwood and Terence J. McGhee, WW76:Aug 76:476
Finite Element Model for Cohesive Sediment Transport, Ranjan Ariathurai and Ray B. Krone, HY3:Mar 76:323:11987
A Geomorphic Study of Pool 25 in the Upper Mississippi River, Michael A. Stevens, Stanley A. Schumm and Daryl B. Simons, WW76:Aug 76:1655
Hans A. Einstein's Contributions in Sedimentation, Hsieh W. Shen, HY5:May 75:469:11290
Incipient Sediment Motion in Entrances with Shell Beds, Ashish J. Mehta and Bent A. Christensen, WW76:Aug 76:960
Initial Operation of the Pakistan Link Canals, Lyman R. Flook, Jr., WW76:Aug 76:1737
Longshore Currents and Sand Transport on Beaches, Paul D. Komar, OE75:June 75:334
Mass Transport and Mean Water Level, Jacobus van de Kreeke, OE75:June 75:1266
Meandering Thalwegs in Straight Alluvial Channels, V. Miguel Ponce and Khalid Mahmood, WW76: Aug 76:1418
Minimum Unit Stream Power and Fluvial Hydraulics, Chih Ted Yang, HY7:July 76:919:12238
Movable-Bed Flow Routing in Open Channel and Its Calibration, Chian-Min Wu, WW76:Aug 76:36
Predicting Material Transportation in Mobile Bay, Gary C. April, Samuel Ng, Hua-An Liu and Donald O. Hill, DIEE:Jan 76:833
Procedural Errors in Alluvial Channel Measurements, Tariq Masood, Khalid Mahmood and M. M. Siddiqui, WW76:Aug 76:591
Response of Carolina Beach Inlet to a Deposition Basin Dredged in the Throat, Adrian J. Combe, III and George M. Watts, DIEE:Jan 76:719
Response of the Mississippi River to the Cutoffs, Brien R. Winkley, WW76:Aug 76:1267
River Response to Development, Everett V. Richardson and Daryl B. Simons, WW76:Aug 76: 1285
Sedimentation Rates in the Upper Mississippi River, J. Roger McHenry, Jerry C. Ritchie and John Verdon, WW76:Aug 76:1339
Sediment Control at Streamside Power Plants, Gary L. Lewis and Ralph R. Marlette, WW76:Aug 76: 1592
Sediment Discharge by Glacier-Fed Rivers in Alaska, Craig H. Everts, WW76:Aug 76:907
Sediment Inertia as Cause of River Antidunes, Gary Parker, HY2:Feb 75:211:11127
Sediment Movement in Tubbs Inlet, North Carolina, Jerry L. Machemehl, Robert P. Masterson, Jr. and Victor V. Cavaroc, Jr., OE75:June 75:313
Sediment Transport in a South Carolina Mountain Stream, Benjamin C. Dysart, III and Charles H. Langdon, III, IR76:July 76:56
Sediment Transport Study, Offshore, New Jersey, Joseph T. DeAlteris, James R. Roney, Lloyd E. Stahl and Chris Carr, OE75:June 75:225
Similitude in Coastal Engineering, Bernard Le Mehaute, WW3:Aug 76:317:12293
Soil Erosion and Sediment Transport from Gullies, Robert F. Piest, Joe M. Bradford and George M. Wyatt, HY1:Jan 75:65:11069
Stochastic Characteristics of Sediment Motions, Hin Fatt Cheong and Hsieh W. Shen, HY7:July 76: 1035:12269

Suspended Sediment in Chesapeake Bay, J. R. Schubel, OE75:June 75:245
The Yellow River: Its Unique Features and Serious Problems, Tsung-Lien Chou, WW76:Aug 76:507

Sediment-Water Interfaces
Sediment-Water Interaction during Dredging Operations, John F. Sustar, Thomas H. Wakeman and Richard M. Ecker, DIEE:Jan 76:736

Sediment Yield
Regional Sediment Yield Analysis of Alaska Streams, Gary L. Guymon, HY1:Jan 74:41:10255

Seepage
Applications of Integral Equation Method to Some Geomechanical Problems, Yoshiji Niwa, Shoichi Kobayashi and Takuo Fukui, NMG:June 76:I-120
Approximate Solution for Unconfined Seepage, Chandrakant S. Desai, IR1:Mar 73:71:9607
Channel Flow Over Permeable Beds of Graded Spheres, Anthony F.E. Zagni and Kenneth V.H. Smith, HY2:Feb 76:207:11892
Comparison of Numerical Schemes, John C. Bruch, Jr. and Roland W. Lewis, NMG:June 76:I-115
Dynamic Relaxation Solution of Seepage Problems, Chandrakant J. Parekh, NMG:June 76:II-1133
Effect of Top Stratum Permeability on Design of Seepage Control Measures, Robert I. Kaufman, GT75:June 75:II-39
The Equivalent Radius of a Source in Numerical Models of Groundwater Flow, Iichiro Kono, NMG: June 76:II-1145
Estimating Seepage Losses from Canal Systems, Robert V. Worstell, IR1:Mar 76:137:11960
Exit of Ground Waters on Drainage Boundaries, Boris S. Browzin, GT2:Feb 76:159:11909
Flow at Interface of Two Anisotropic Soil Zones, Robin N. Chowdhury, TN: GT11:Nov 76:1195: 12513
Foundation Treatment for Little Blue Run Dam, Gerald R. Thiers, Larry W. Lobdell and Bernard M. Mihalcin, GT76:Aug 76:283
Fundamentals of Piping, Richard F. Flanagan, Preprint No.2766, Sept 76, 18pp.
Numerical Solution of Boussinesq Equation, Sita Ram Singh and C. M. Jacob, EM5:Oct 76:807: 12463
Numerical Solution of Unconfined Seepage Problems, W. D. Liam Finn and Erol Varoglu, NMG:June 76: III-1465
Oxnard-Hueneme Pipeline, Operation and Water Quality Problems, Richard A. Smith, Preprint No.2683, Apr 76, 8pp.
Oxygen Depletion and Sulfate Production in Strip Mine Spoil Dams, J. H. Amend, Dinshaw N. Contractor and Chandrakant S. Desai, NMG:June 76:II-1155
Plastic-Reinforced Asphalt Seepage Barrier, Ronald K. Frobel and C. Brent Cluff, IR3:Sept 76:369: 12430
Radial Dispersion in Ground-Water Flow, Bruce W. Hunt, EM6:Dec 74:1117:10998
Review of Selected Topics in Finite Element Analysis, Robert D. Cook, ST76:Aug 76:535
Seepage from Trapezoidal Canal in Anisotropic Soil, Annapareddy S. Reddy and Udayaditya Basu, IR3: Sept 76:349:12386
Seepage through Opening in Cutoff Wall Under Weir, Suresh P. Brahma, GT3:Mar 75:329:11204
Site Evaluation and Design of Seepage Fields, Kent A. Healy and Rein Laak, EE5:Oct 74:1133:10882
Steady Non-Darcian Seepage Through Embankments, P. Basak, IR4:Dec 76:435:12623
Studies on Seepage from Canals with Partial Lining, Kanakatti Subramanya, Madhira Radha Madhav and Govinda Chandra Mishra, HY12:Dec 73:2333: 10197
Transient Dispersion in Uniform Media Flow, Hung Tao Shen, HY6:June 76:707:12202
Water Movement in Soil from Trickle Source, Ahmed Y. Hachum, Jose F. Alfaro and Lyman S. Willardson, IR2:June 76:179:12204

Seepage Control
Foundation of the Sirikit Powerhouse, James D. Gill and Leib Wolofsky, GT76:Aug 76:82

Seepage Losses
Estimating Seepage Losses from Canal Systems, Robert V. Worstell, IR1:Mar 76:137:11960

Segmented Elements
Segmental Bridges in Oregon, Louis F. Pierce, TE4: Nov 76:673:12548

Seiches
Design Basis Flooding at Offshore Reactor Sites, Ronald M. Noble, OE75:June 75:89

Seismic Design
California Coastal Commission Accepts Advice from ASCE on Earthquake Design Controversy, Samuel H. Clark, CE:May 76:85
California's Seismic Design Criteria for Bridges, James H. Gates, ST12:Dec 76:2301:12636
Design Spectra for Nuclear Power Plants, Ricardo A. Guzman and Paul C. Jennings, PO2:Nov 76:165: 12521
Development of Expectancy Maps and Risk Analysis, Neville C. Donovan, Bruce A. Bolt and Robert V. Whitman, Preprint No.2805, Sept 76, 19pp.
Development of United States Atomic Energy Commission Regulatory Standards, Robert Minogue, SDNPF:Dec 73:III-110
Dynamic Soil Structure Interaction, Jose M. Roesset, NMG:June 76:I-3
Dynamic Stiffness of Piles, G. W. Blaney, Eduardo Kausel and Jose M. Roesset, NMG:June 76:II-1001
Earthquake Design of Buildings:Damping, Gary C. Hart and Ramaswami Vasudevan, ST1:Jan 75:11: 11041
Earthquake Finite Element Analysis of Structure-Foundation Systems, Ashok K. Vaish and Anil K. Chopra, EM6:Dec 74:1101:10990
Earthquake Resistant Design of Intake-Outlet Towers, Anil K. Chopra and C-Y. Liaw, ST7:July 75:1349:11422
Efficient Finite Element Analysis of Seismic Structure-Soil-Structure Interaction, John Lysmer, H. Bolton Seed, T. Udaka, Richard N. Hwang and C.-F. Tsai, STN75:Dec 75:II-125
Evaluation of an Existing Building Complex for Earthquake Response, Sigmund A. Freeman, ST76: Aug 76:781
Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities, E. D'Appolonia, H. Bolton Seed, Robert V. Whitman, Shih-Lung Chu, Carl J. Costantino, Asadour H. Hadjian, Izzat M. Idriss, John Lysmer, R. Scavuzzo and Milomir Stoykovich, SDNPF:Dec 73:III-19
General Panel — Summary of Presentations, John D. Stevenson, E. J. Keith, Nathan M. Newmark, R. E. Keever, Jack E. Cermak, H. Bolton Seed and M. J. Holley, SDNPF:Dec 73:III-81
Generation of Seismic Floor Spectra, Mahendra P. Singh, EM5:Oct 75:593:11651
Hybrid Techniques for Inelastic Dynamic Problems, Chang-Kuei Sun, ST4:Apr 75:889:11221
Inelastic Cyclic Response of Split K-Braced Frames, Movses J. Kaldjian, Preprint No.2788, Sept 76, 15pp.
Optimal Aseismic Design of Building and Equipment, Shih-Chi Liu, M. R. Dougherty and F. Neghabat, EM3:June 76:395:12208
Optimum Seismic Design of Linear Shear Buildings, Emilio Rosenblueth and Alejandro Asfura, ST5: May 76:1077:12119
Preview—1976 Offshore Technology Conference, CE: Apr 76:67
Progress Report of ASCE Ad Hoc Committee on Soil Structure Interaction, Izzat M. Idriss, STN75: Dec 75:II-236
The Role of Geotechnical Engineering in Land Use Planning, Ronald C. Hirschfeld, EFEEC:Aug 75:65

Scope of Input to Seismic Design Problem — Past Cooperation and Current Liason, Bruce C. Olsen, Preprint No.2812, Sept 76, 13pp.
Seismic Analysis of Offshore Structures in the Inelastic Range, Joseph Kallaby, Preprint No.2722, Apr 76, 30pp.
Seismic Analysis of Underground Structural Elements, Hemant H. Shah and Shih-Lung Chu, PO1:July 74:53:10648
Seismic Behavior of K-Braced Framing Systems, James C. Anderson, ST10:Oct 75:2147:11636
Seismic Cracking of Concrete Gravity Dams, Narinder Pal, ST9:Sept 76:1827:12432
Seismic Design Decision Analysis, Robert V. Whitman, John M. Biggs, C. Allin Cornell, John E. Brennan, III, Richard L. de Neufville and Erik H. Vanmarcke, ST5:May 75:1067:11309
Seismic Design of Liquid-Storage Tanks, Howard I. Epstein, ST9:Sept 76:1659:12380
Seismic Design of Non-Structural Building Systems, Alfred Goldberg, Preprint No.2756, Sept 76, 14pp.
Seismic Design of Reinforced Earth Walls, Gregory N. Richardson and Kenneth L. Lee, GT2:Feb 75: 167:11143
The Seismic Design of the Dumbarton Bridge, Charles Seim, Preprint No.2811, Sept 76, 25pp.
Seismic Design Spectra for Nuclear Power Plants, Nathan M. Newmark, John A. Blume and Kanwar K. Kapur, PO2:Nov 73:287:10142
The Seismic Regime in a Minor Earthquake Zone, G. A. Bollinger, NMG:June 76:II-917
Seismic Rehabilitation of Buildings With Special Importance, Daniel Shapiro, Preprint No.2787, Sept 76, 17pp.
Seismic Response and Liquefaction of Sands, W. D. Liam Finn, Peter M. Byrne and Geoffrey R. Martin, GT8:Aug 76:841:12323
Seismic Risk Analysis of Boston, C. Allin Cornell and Hans A. Merz, ST10:Oct 75:2027:11617
Seismic Supports for Electrical Cable Systems, Anil K. Kar and Sitansu S. Sinha, PO1:July 75:95:11464
Soil Pressure and Overturning Analyses of Structures Under Three Directional Seismic Loads by Using SRSS Combination, Frank J. Hsiu, STN75:Dec 75: II-331
Soil-Structure Interaction Analyses for Seismic Response, H. Bolton Seed, John Lysmer and Richard N. Hwang, GT5:May 75:439:11318
A Structural Design Decision Methodology for Nuclear Power Plants, Samad Zendehrouh and Masanobu Shinozuka, ST76:Aug 76:517
Structural Design of Nuclear Plant Facilities, John D. Stevenson, Chmn., SDNPF:Dec 73
Substitute-Structure Method for Seismic Design in R/C, Akenori Shibata and Mete A. Sozen, ST1:Jan 76:1:11824
Tall Buildings under Five-Component Earthquakes, Emilio Rosenblueth, TN: ST2:Feb 76:455:11886
Three Dimensional Seismic Analysis for a Floating Nuclear Plant Using Finite Element Procedures, Harry W. Johnson, Ashok K. Vaish and Frank L. Porter, Preprint No.2700, Apr 76, 23pp.
Vertical Seismic Response Spectra, Paul C. Rizzo, Donald E. Shaw and Matthew D. Snyder, PO1:Jan 76:121:11858
World's Third Longest Cantilever Bridge, Ichiro Konishi, CE:Feb 76:84

Seismic Detection
Seismic Instrumentation of Dams, Bruce A. Bolt and Donald E. Hudson, GT11:Nov 75:1095:11697

Seismic Investigations
Dynamic Finite Element Modeling of Near Field from San Fernando 1971 Earthquake, Samuel T. Harding and David Perkins, NMG:June 76:II-955

Seismic Properties
Interaction of Soil and Power Plants in Earthquakes, Jeremy Isenberg and Samy A. Adham, PO2:Oct 72: 273:9242
Seismic Evaluation of Embankments, Richard W. Kramer, NMG:June 76:III-1445

Seismic Reflection
Seismic SSI of Nuclear Power Plant Structures, Izzat M. Idriss and Khosrow Sadigh, GT7:July 76:663: 12246

Seismic Refraction
Method for Crosshole Seismic Testing, Robert F. Ballard, Jr., GT12:Dec 76:1261:12646

Seismic Stability
Seismic Supports for Electrical Cable Systems, Anil K. Kar and Sitansu S. Sinha, PO1:July 75:95:11464

Seismic Studies
Characteristics Method for Liquefaction of Soils, E. Benjamin Wylie and Victor L. Streeter, NMG:June 76:II-938
Development of Expectancy Maps and Risk Analysis, Neville C. Donovan, Bruce A. Bolt and Robert V. Whitman, Preprint No.2805, Sept 76, 19pp.
Evaluation of an Existing Building Complex for Earthquake Response, Sigmund A. Freeman, ST76: Aug 76:781
Measurements and Evaluation of Building Response to Ground Motion at Various Stages of Construction, Kenneth K. Honda, ST76:Aug 76:403
Seismic Design of Offshore Concrete Structures, Ben C. Gerwick, Jr. and Shighero Watanabe, Preprint No.2729, Apr 76, 8pp.
The Seismic Regime in a Minor Earthquake Zone, G. A. Bollinger, NMG:June 76:II-917
Seismic Response of Pipelines on Friction Supports, James C. Anderson and Anand K. Singh, EM2:Apr 76:275:12043

Seismic Surveys
The Seismic Regime in a Minor Earthquake Zone, G. A. Bollinger, NMG:June 76:II-917

Seismic Tests
In Situ Measurement of Soil Properties, Harvey E. Wahls, Chmn., GT75:June 75
Method for Crosshole Seismic Testing, Robert F. Ballard, Jr., GT12:Dec 76:1261:12646
Unreliability of Qualifying Active Mechanical Equipment by Testing Only, Ahmed E. Meligi, STN75:Dec 75:II-11

Seismic Waves
Interface Shear Transfer and Dowel Action in Cracked Reinforced Concrete Subject to Cyclic Shear, Rafael Jimenez, Philip Perdikaris, Peter Gergely and Richard N. White, ST76:Aug 76:457
Session 6: Soil Structure Interaction — Seismic Waves, Juan Enrique Luco, STN75:Dec 75:II-172

Seismographs
Development of Expectancy Maps and Risk Analysis, Neville C. Donovan, Bruce A. Bolt and Robert V. Whitman, Preprint No.2805, Sept 76, 19pp.
Seismic Instrumentation of Dams, Bruce A. Bolt and Donald E. Hudson, GT11:Nov 75:1095:11697

Semiarid Land
Autogeometry of Semi-Arid Channel Systems, John Barrie Thornes, WW76:Aug 76:1715

Sensible Heat
Comparison of Warm Water Evaporation Equations, Richard N. Weisman, HY10:Oct 75:1303:11620

Sensitivity
Sensitivity of Estuarine Circulation Model, John D. Wang, OE75:June 75:1035

Sensitivity Analysis
Automated Ground Transportation System Stations with Multiple Loading Positions, Dietrich R. Bergmann, TE2:May 75:383:11328

Separation Techniques
Benefits of Separating Pedestrians and Vehicles, Ronald L. Braun and Marc F. Roddin, BP75:Dec 75:406

Septic Tanks
Characteristics of Rural Household Wastewater., Robert Siegrist, Michael Witt and William C. Boyle, EE3:June 76:533:12200
Intermittent Sand Filtration of Household Wastewater, David K. Sauer, William C. Boyle and Richard J. Otis, EE4:Aug 76:789:12295
Landfill Disposal of Liquid Sewage Sludge, Ralph Stone, EE1:Feb 75:91:11112
Performance of Single Household Treatment Units, Richard J. Otis and William C. Boyle, EE1:Feb 76: 175:11895
Septic Tank Efficiency, Thiruvenkatachari Viraraghavan, TN: EE2:Apr 76:505:12016
Site Evaluation and Design of Seepage Fields, Kent A. Healy and Rein Laak, EE5:Oct 74:1133:10882

Serology
Disease Risks of Occupational Exposure to Sewage, C. Scott Clark, Edward J. Cleary, Gilbert M. Schiff, Clavin C. Linneman, Jr., John P. Phair and Terrence M. Briggs, EE2:Apr 76:375:12038

Serviceability
Response to Stochastic Wind of N-Degree Tall Buildings, William E. Saul, P. Jayachandran and Alain H. Peyrot, ST5:May 76:1059:12112

Service Life
Low-Temperature Tests of Simulated Bridge Members, Charles G. Schilling, Karl H. Klippstein, John M. Barsom, Stephan R. Novak and Gilbert T. Blake, ST1:Jan 75:31:11049
Numerical Analysis of Thermal Crack Propagation in Pavement Overlays, H. S. Chang, Robert L. Lytton and S. H. Carpenter, NMG:June 76:I-526

Services
Marketing's Role in Construction Firms, Richard M. Bessom, CO3:Sept 75:647:11592

Settlement (Structural)
Analysis of a Test Embankment Considering the Anisotropy of the Soil, Hakan Stille, A. Fredriksson and Bengt B. Broms, NMG:June 76:II-611
Analysis of Buried Pipe Under Embankment, Shamsher Prakash, Gyan C. Nayak and R. Gupta, NMG:June 76:II-886
Analysis of Consolidation in Cores of Earth Dams, Zdenek Eisenstein, Addanki V.G. Krishnayya and Steven T.C. Law, NMG:June 76:II-1089
Analysis of Creep Settlement of Pile Foundations, John R. Booker and Harry G. Poulos, GT1:Jan 76: 1:11826
Bearing Capacity and Settlement of Pile Foundations, George Geoffrey Meyerhof, GT3:Mar 76:195:11962
Compressibility of Undisturbed Submarine Sediments, William F. Brumund and Gordon W. Callender, Jr., OE75:June 75:363
Consolidation of Root-Penetrated Clays: A Case Study, Michael W. O'Neill, B. Kent Merritt and Ronald Calsing, GT8:Aug 76:857:12318
Consolidation Settlement of a Layered Subsurface, Surendra K. Saxena, Chandrakant S. Desai and Jayant Vir, NMG:June 76:II-1082
Consolidation Settlement of a Layered Subsurface, Surendra K. Saxena and Chandrakant S. Desai, NMG:June 76:III-1419
Constitutive Laws for Sand in Dynamic Shear, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, NMG:June 76:I-270
Design of Transit Structures for Urban Areas, David G. Hammond and Drupad B. Desai, TE1:Feb 76:1: 11918
Differential Settlement of Buildings, Rebecca Grant, John T. Christian and Erik H. Vanmarcke, GT9: Sept 74:973:10802
Experience in Using Dredge Material for Construction Purposes, Joseph H. Lamar and James E. Laier, DIEE:Jan 76:882
FE Analysis of Soil Movements Below a Test Embankment, Toru Shibata, Masanari Tominaga and Hajime Matsuoka, NMG:June 76:II-599
Finite Element Analysis of Piles in Viscoelastic Soil, John R. Booker and Harry G. Poulos, NMG:June 76:I-425
Foundation of the Sirikit Powerhouse, James D. Gill and Leib Wolofsky, GT76:Aug 76:82
Generalisation of Sequential Nonlinear Analysis: A Study of Rockfill Dam with Joint Elements, Heramb D. Sharma, Gyan C. Nayak and J. B. Maheshwari, NMG:June 76:II-662
Lessons Learned in Finite Element Analyses of Temporary Excavations in Soft Clay, G. Wayne Clough and Abdulaziz I. Mana, NMG:June 76:I-496
Liquefaction Considerations in Nuclear Plant Design, Joseph L. Ehasz, Jr. and William F. Mercurio, STN75:Dec 75:II-142
Method of Calculating Long-Term Creep Settlements, Harry G. Poulos, Laurence P. de Ambrosis and Edward H. Davis, GT7:July 76:787:12273
Mica Dam Embankment Stress Analysis, Nigel A. Skermer, GT3:Mar 75:229:11162
A New Concept for the Relative Rigidity of Rafts, B. Ramanathan, NMG:June 76:I-489
New York's Glacial Formation of Varved Silt and Clay, James D. Parsons, GT6:June 76:605:12218
Nonlinear Settlement Analysis by Finite Element, Leonard Domaschuk and Palaniappan Valliappan, GT7:July 75:601:11423
Planning and Performing Compaction Grouting, James Warner and Douglas R. Brown, GT6:June 74:653:10606
Response of Footings on Micaceous, Cohesionless Soils, Jean M.E. Audibert, Nabil F. Ismael and G. Wayne Clough, NMG:June 76:I-567
Rutting Failure in Full-Depth Asphalt Pavement, Jacob Greenstein and Moshe Livneh, TE4:Nov 75: 737:11690
Sanitary Landfill Settlement Rates, Bing C. Yen, GT5:May 75:475:11335
Settlement of Building on Pile Foundation in Sand, Robert M. Koerner and Antal Partos, GT3:Mar 74: 265:10405
Settlement of Sands under Multidirectional Shaking, Robert M. Pyke, H. Bolton Seed and Clarence K. Chan, GT4:Apr 75:379:11251
Settlement of Thawing Embankment, Bernard D. Alkire, Wilbur M. Haas and James J. Botz, TN: GT8:Aug 76:877:12287
Stress Distribution for Heavy Embedded Structures, Kul Bhushan and Steven C. Haley, TN: GT7:July 76:807:12227
Three-Dimensional Analysis of Vertical Pile Groups, Prasanta K. Banerjee and Richard M. Driscoll, NMG:June 76:I-438
Viscoelastic Analysis About Deformation of Weak Ground, Tomoyuki Akagi, Yoshinori Ito and Makoto Irobe, NMG:June 76:II-639
3-D Finite Element Analysis of a Dam Foundation, Walter Wittke and Stephen Semprich, NMG:June 76:III-1385
3-D Stability Analysis of Tunnels in Jointed Rock, Walter Wittke and Bernd Pierau, NMG:June 76:III-1401

Settlement Records
Differential Settlement of Buildings, Rebecca Grant, John T. Christian and Erik H. Vanmarcke, GT9: Sept 74:973:10802
Recording Rapid Settlement by the Oedometer, David M. McCann, Jon Darwell and Bruce Denness, OE75:June 75:401
Sanitary Landfill Settlement Rates, Bing C. Yen, GT5:May 75:475:11335

Settling
Solid Particle Settlement in Open-Channel Flow, Ruh-Ming Li and Hsieh W. Shen, HY7:July 75:917: 11460

Settling Basins
Boundary Layer Separation Concept of Settling Tanks, Yishu Chiu, EE6:Dec 74:1213:11019
Dynamic Response of Settling Basins, Sadataka Shiba and Yoriteru Inoue, EE5:Oct 75:741:11609
Effects of Deposit Resuspension on Settling Basin, Takeichiro Takamatsu, Masaaki Naito, Sadataka Shiba and Yasuyo Ueda, EE4:Aug 74:883:10705

Settling Velocity
Laboratory Evaluation of Polymeric Flocculants, Andrew Benedek and John J. Bancsi, EE1:Feb 76: 17:11887

Sewage
Chemical Sludge Dewatering on Sand Beds, John T. Novak and Gail E. Montgomery, EE1:Feb 75:1: 11111
Sewering the City of New York, Martin Lang, Charles Samowitz, Mohan Jethwani and Frederick Novotny, CE:Jan 76:54

Sewage Bacteria
Disease Risks of Occupational Exposure to Sewage, C. Scott Clark, Edward J. Cleary, Gilbert M. Schiff, Clavin C. Linneman, Jr., John P. Phair and Terrence M. Briggs, EE2:Apr 76:375:12038
Equalization of Flow Variations in Combined Sewers, Lars-Eric Janson, Stein Bendixen and Anders Harlaut, EE6:Dec 76:1139:12596

Sewage Disposal
Coastal Dispersion of Pollutants, Ryszard B. Zeidler, WW2:May 76:235:12121
Concentric Waste-Treatment Plant Saves Land, Sterling G. Brisbin, CE:Feb 76:74
Decisions About Wastewater Technology, 1800-1932, Joel A. Tarr and Francis Clay McMichael, Preprint No.2792, Sept 76, 30pp.
Detention Storage Control Strategy Development, Harry G. Wenzel, Jr., John W. Labadie and Neil S. Grigg, WR1:Apr 76:117:12070
Diffusion and Mixing Processes of an Ocean (Abstract), Abhimanyu Swain, Harold D. Palmer and Kent T.S. Tzou, OE75:June 75:1436
Environmental Design for Istanbul Sewage Disposal, Charles G. Gunnerson, EE1:Feb 74:101:10343
Fate of Wastewater Bacteria and Viruses in Soil, Charles P. Gerba, Craig Wallis and Joseph L. Melnick, IR3:Sept 75:157:11572
Ground-Water's Role in Water Quality Management, John O. Osgood, HY3:Mar 75:517:11159
Landfill Disposal of Liquid Sewage Sludge, Ralph Stone, EE1:Feb 75:91:11112
Let's Consider Land Treatment, Not Land Disposal, Ants Uiga, Alfred T. Wallace and David H. Howells, CE:Mar 76:60
Phosphorus Model of Muskegon Wastewater System, Carl G. Enfield and Lowell E. Leach, EE6:Dec 75: 911:11775
Status of NOAA's Ocean Dumping Research in the New York Bight, R. Lawrence Swanson, Preprint No.2690, Apr 76, 30pp.
Use of Jet Pumps in Marine Waste Disposal, Yerachmiel Argaman, Michael Vajda and Noah Galil, EE5:Oct 75:703:11639

Sewage Effluents
Concentric Waste-Treatment Plant Saves Land, Sterling G. Brisbin, CE:Feb 76:74
Determination of Length and Direction of Ocean Outfall Diffuser at Wantagh Sewage Treatment Plant, Nassau County, New York, Wen H. Huang, OE75:June 75:1294
Fate of Metals in Wastewater Discharge to Ocean, Naresh K. Rohatgi and Kenneth Y. Chen, EE3: June 76:675:12194
Fate of Nitrogen in Sewage Effluent Applied to Soil, J. Clarence Lance, IR3:Sept 75:131:11570
Health Considerations in Use of Tertiary Effluents, Robert C. Cooper, Preprint No.2723, Apr 76, 18pp.
Impact on Marine Benthos of Waste Water Discharge, Gerald T. Orlob and Dennis A. O'Leary, Preprint No.2658, Apr 76, 25pp.
Influence of Activated Sludge CRT on Adsorption, Byung R. Kim, Vernon L. Snoeyink and F. Michael Saunders, EE1:Feb 76:55:11937
Performance of Single Household Treatment Units, Richard J. Otis and William C. Boyle, EE1:Feb 76: 175:11895
Persistence of Virus on Sewage-Irrigated Vegetables, Edward P. Larkin, John T. Tierney and Robert Sullivan, EE1:Feb 76:29:11935
Physicochemical Approach to Water and Wastewater Filtration, Mriganka M. Ghosh, Thomas A. Jordan and Ronald L. Porter, EE1:Feb 75:71:11120
Pollution Prediction Model of Long Island Sound, Malcolm J. Bowman, OE75:June 75:1084
Proposed Standards: Land Disposal of Effluents, John V. Betz, CE:May 75:77
Recycling Allows Zero Wastewater Discharge, Lloyd A. Dove, CE:Feb 75:48
Response of South Platte to Effluent Limitations, David W. Hendricks and Mark H. Bluestein, EE4: Aug 76:745:12294
Sewage Effluent Turned to Snow: Provides Storage, Removes Pollutant, Kenneth R. Wright, CE:May 76:88
Simulation of Water Quality in Tarawera River, J. Christopher Rutherford and Michael J. O'Sullivan, EE2:Apr 74:369:10461
Some Thoughts on Zero Discharge, Paul Fleming, EI2:Apr 76:179:12082
Unsaturated Flow During Soil Treatment of Septic Tank Effluent, Johannes Bouma, EE6:Dec 75:967: 11783
Virus Sampling in Wastewater—Field Experiences, Robert P. Miele and Michael W. Selna, Preprint No.2724, Apr 76, 30pp.

Sewage Sludge
Landfill Disposal of Liquid Sewage Sludge, Ralph Stone, EE1:Feb 75:91:11112
Monitoring Sludge Disposal — Mid-Atlantic Shelf, Geraldine V. Cox, Steven A. Townsend and Priya Wickramarante, OE75:June 75:1314
New Gravity/Pressure Unit Cuts Sludge Dewatering Costs, Eugene E. Dallaire, CE:Jan 76:69
Persistence of Virus on Sewage-Irrigated Vegetables, Edward P. Larkin, John T. Tierney and Robert Sullivan, EE1:Feb 76:29:11935
Pyrolysis as Means of Sewages Sludge Disposal, Nancy E. Folks, R. Addis Lockwood, Bert A. Eichenberger, Frank R. Bowerman and Kenneth Y. Chen, EE4:Aug 75:607:11518

Sewage Treatment
Characteristics of Rural Household Wastewater., Robert Siegrist, Michael Witt and William C. Boyle, EE3:June 76:533:12200
Column Settling Tests for Flocculant Suspensions, Alphonse E. Zanoni and Marshall W. Blomquist, EE3:June 75:309:11356
Designing More Reliable Waste Treatment Plants, Michael J. Partridge and Charles H. Sutfin, CE:Jan 75:68
Design of Integrated Approach to Nutrient Removal, David L. Eisenhauer, Ronald B. Sieger and Denny S. Parker, EE1:Feb 76:37:11906
Effluent Irrigation of Pearl Millet, Allen R. Overman, EE2:Apr 75:193:11233
Effluent Irrigation of Rye and Ryegrass, Allen R. Overman and Hsiao-Ching Ku, EE2:Apr 76:475: 12035
Environmental Systems at Walt Disney World, Arthur C. Bravo, EE6:Dec 75:887:11755
Laboratory Evaluation of Polymeric Flocculants, Andrew Benedek and John J. Bancsi, EE1:Feb 76: 17:11887
Legal Perspective on Water Quality Management, Douglas R. Blazey, HY5:May 75:595:11320
Modeling Sewage Treatment Plant Input BOD Data, Paul M. Berthouex, William G. Hunter, Lars C. Pallesen and Chun-Yen Shih, EE1:Feb 75:127: 11132
Optimizing Flocculator Power Input, Rafael Andreu-Villegas and Raymond D. Letterman, EE2:Apr 76: 251:12032

Philadelphia Pilots--Builds Oxygen Activated Sludge, Carmen F. Guarino, Michael D. Nelson and Allan B. Edwards, EE4:Aug 74:919:10722
Phosphorus Uptake by Biological Slimes, Alphonse E. Zanoni, EE6:Dec 76:1229:12621
Planning and Control of Combined Sewerage Systems, William R. Giessner, Robert T. Cockburn, Frank H. Moss, Jr. and Mark E. Noonan, EE4:Aug 74:1013:10744
Recycling Allows Zero Wastewater Discharge, Lloyd A. Dove, CE:Feb 75:48
Septic Tank Efficiency, Thiruvenkatachari Viraraghavan, TN: EE2:Apr 76:505:12016
Sewage Effluent Turned to Snow: Provides Storage, Removes Pollutant, Kenneth R. Wright, CE:May 76:88
Statistical Study of Phosphorus Removal in Wisconsin, Martin H. David, Frederick J. Schroeder, J. Jeffrey Peirce, Erhard F. Joeres and Daryl A. Braasch, EE2:Apr 76:433:12045
Urban Runoff Pollution Control—State-of-the-Art, Richard Field and John A. Lager, EE1:Feb 75:107:11129
Water Resources Planning in Urban Areas, Robert L. Fulton, HY9:Sept 75:1249:11571

Sewage Treatment Plants
Concentric Waste-Treatment Plant Saves Land, Sterling G. Brisbin, CE:Feb 76:74
Designing More Reliable Waste Treatment Plants, Michael J. Partridge and Charles H. Sutfin, CE:Jan 75:68
Determination of Length and Direction of Ocean Outfall Diffuser at Wantagh Sewage Treatment Plant, Nassau County, New York, Wen H. Huang, OE75:June 75:1294
Dynamic Programming Model for Wastewater Plant Investment, John M. Armstrong, EE5:Oct 76:985:12466
Equalization of Time Variable Waste Loads, Vladimir Novotny and Robert M. Stein, EE3:June 76:613:12191
Land-Based Modeling System for Water Quality Management Studies, Walter M. Grayman, Richard M. Males, William E. Gates and A. W. Hadder, HY5:May 75:567:11327
Philadelphia—Civil Engineering News Roundup, CE:June 76:60
Productivity and the Construction Grants Program for Wastewater Treatment Works: An EPA View, Harold P. Cahill, Jr., PROD:Aug 76:205
Theory of Storage and Treatment-Plant Overflows, Charles D.D. Howard, EE4:Aug 76:709:12310
Trickling Filter-Activated Sludge Combinations, Robert F. Roskopf, James C. Young and E. Robert Baumann, EE5:Oct 76:1005:12460

Sewage Works
Designing More Reliable Waste Treatment Plants, Michael J. Partridge and Charles H. Sutfin, CE:Jan 75:68
Optimal Design of Wastewater Collection Systems, J. M. Gupta, S. K. Agarwal and P. Khanna, EE5:Oct 76:1029:12479

Sewer Pipes
Risk-Safety Factor Relation for Storm Sewer Design, Ben Chie Yen and Wilson H. Tang, TN: EE2:Apr 76:509:12016
Sewer Line Design Based on Critical Shear Stress, Kuan M. Yao, EE2:Apr 74:507:10480

Sewers
Austin's 11-Mile Sewer Tunnel Reflects Sound Economic, Environmental Alternatives, Albert M. Eldridge, CE:Aug 76:52
Decisions About Wastewater Technology, 1800-1932, Joel A. Tarr and Francis Clay McMichael, Preprint No.2792, Sept 76, 30pp.
Design of Storm Sewer Networks, Ben Chie Yen and Ahmet Suha Sevuk, EE4:Aug 75:535:11503
Flood Routing Through River Junctions, Ben Chie Yen and A. Osman Akan, WW76:Aug 76:212
Ground-Water's Role in Water Quality Management, John O. Osgood, HY3:Mar 75:517:11159
Highway and Sewer Impacts on Urban Development, Frank T. Rabe and James F. Hudson, UP2:Nov 75:217:11728
Infiltration-Inflow Analysis, David J. Cesareo and Richard Field, EE5:Oct 75:775:11645
Laboratory Study of Energy Losses at Storm Sewer Junctions, Jan R. Prins and David R. Townsend, IR76:July 76:609
Land-Use Model for Service Area Projection, Peter M. Meier, EE1:Feb 76:71:11932
Maintenance of Services during Construction, Claude Cossette and Ernest Zbinden, CO1:Mar 75:155:11186
Model for Layout and Design of Sewer Systems, Larry W. Mays, Harry G. Wenzel, Jr. and Jon C. Liebman, WR2:Nov 76:385:12580
Risk-Safety Factor Relation for Storm Sewer Design, Ben Chie Yen and Wilson H. Tang, TN: EE2:Apr 76:509:12016
Sediment Transport in Smooth Fixed Bed Channels, Pavel Novak and Chandramouli Nalluri, HY9:Sept 75:1139:11556
Sewering the City of New York, Martin Lang, Charles Samowitz, Mohan Jethwani and Frederick Novotny, CE:Jan 76:54
Sewer Line Design Based on Critical Shear Stress, Kuan M. Yao, EE2:Apr 74:507:10480

Shafts (Mining)
Half a Century Progress in Soft Ground Tunneling, George A. Fox and Louis E. Nicolau, CO4:Dec 76:637:12622

Shallow Water
Quadratic Finite Elements in Shallow Water Problems, Paul W. Partridge and Carlos A. Brebbia, HY9:Sept 76:1299:12418

Shear
Analysis of Interconnected Open Section Shear Wall Structures, Bungale S. Taranath, ST11:Nov 75:2367:11736
Analysis of RC Shear Panels under Cyclic Loading, David Darwin and David A. Pecknold, ST2:Feb 76:355:11896
Avoidance of Parasitic Shear in Plane Element, Robert D. Cook, ST6:June 75:1239:11370
Buckling Formulas for Corrugated Metal Shear Diaphragms, John T. Easley, ST7:July 75:1403:11429
Coupled Shear Wall Analysis by Lagrange Multipliers, Riadh S. Al-Mahaidi and Arthur H. Nilson, ST11:Nov 75:2359:11732
Interface Shear Transfer and Dowel Action in Cracked Reinforced Concrete Subject to Cyclic Shear, Rafael Jimenez, Philip Perdikaris, Peter Gergely and Richard N. White, ST76:Aug 76:457
Resistance to Flows in Alluvial Channels, ChiEmeka G. Ilo, HY6:June 75:665:11352
Shear Failure Due to Web Crushing in Prestressed Concrete I-Beams, Larp Chitnuyanondh, T. Ivan Campbell, Barrington deV. Batchelor and Paul Csagoly, T76:Aug 76:476
Shear of Light-Gage Partitions in Tall Buildings, Wagih M. El-Dakhakhni, ST7:July 76:1431:12257
Strength and Related Properties of Brick Masonry, Clayford T. Grimm, ST1:Jan 75:217:11066
Tests of Welded Steel Beam-to-Column Moment Connections, John Parfitt, Jr. and Wai F. Chen, ST1:Jan 76:189:11854

Shear Distribution
Shear Lag in Shallow Wide-Flanged Box Girders, Karl Van Dalen and Sanivarapu V. Narasimham, ST10:Oct 76:1969:12449

Shear Failure
Bailey's Crossroads: A/E Liability Test, Virginia Fairweather, CE:Nov 75:58

Shear Flow
Flow Visualization in Free Shear Layers, Joseph A. Clark and Eric Markland, HY11:Nov 73:1897: 10119
Mean Energy in Gradually Diverging Flow, Alan F. Babb and Jaime Amorocho, HY5:May 76:581: 12097
Three-Dimensional Pollutant Modeling in Shear Flow, Gour-Tsyh Yeh, HY3:Mar 76:351:12005

Shear Forces
Comparison of Three-Dimensional Analysis of Concrete Shear Wall Buildings and Their Actual Behavior, Venkataswamy Ramakrishnan, ST76:Aug 76:95
Integral-Equation Analysis of Flows Over Eroding Beds, S. N. Prasad and Carlos V. Alonso, WW76: Aug 76:760
Interface Shear Transfer and Dowel Action in Cracked Reinforced Concrete Subject to Cyclic Shear, Rafael Jimenez, Philip Perdikaris, Peter Gergely and Richard N. White, ST76:Aug 76:457

Shear Modulus
Constrained and Shear Moduli for Finite Element, Vincent P. Drnevich, GT5:May 75:459:11319
Dynamic Shear Moduli for Dry Sands, Mehmet A. Sherif and Isao Ishibashi, GT11:Nov 76:1171:12572
Effect of Uplift on Soil-Structure Interaction and Toe Pressure Calculation, Dale R. Bervig and Chang Chen, STN75:Dec 75:II-351
Finite Element Analysis of Stresses and Movements in Excavations, Hiromitsu Izumi, Katsumi Kamemura and Seiichi Sato, NMG:June 76:II-701
In Situ Measurement of Initial Stress and Deformation Characteristics, C. Peter Wroth, GT75:June 75:II-181
Stress-Strain Behavior of Soft Bangkok Clay, A. S. Balasubramaniam and A. R. Chaudhry, NMG:June 76:I-390
Time-Dependent Increase in Shear Modulus of Clay, Donald G. Anderson and Richard D. Woods, GT5: May 76:525:12147

Shear Planes
Auburn-Foresthill Bridge Abutment Slope Stability, J. Lawrence Von Thun and Bruce M. Moyes, GT76: Aug 76:333

Shear Properties
Shear Analysis of Tapered Beams, Ken P. Chong, William D. Swanson and Robert B. Matlock, ST9: Sept 76:1781:12411

Shear Stability
Bearing Capacity of Offshore Gravity Structures, Surendra K. Saxena, W. M. Kilkenny and Joseph A. Fischer, OE75:June 75:450

Shear Strain
Structural Analysis of Flexible Airfield Pavements, Richard G. Ahlvin, Yu Tang Chou and Ronald L. Hutchinson, TE3:Aug 74:625:10727
Torsional Analysis of Perforated Core Structure, Avigdor V. Rutenberg and Wai K. Tso, ST3:Mar 75:539:11167

Shear Strength
Calculation of Steel Diaphragm Behavior, J. Michael Davies, ST7:July 76:1411:12254
Composite Steel-Deck Concrete Floor Systems, Reinhold M. Schuster, ST5:May 76:899:12116
Computation of Seismic Induced Flow Landslide, Hung Tao Shen and Wen Huang, NMG:June 76:II-1054
Constrained and Shear Moduli for Finite Element, Vincent P. Drnevich, GT5:May 75:459:11319
Curvilinearly Corrugated Plates in Shear, Lung-Hsiang Wu and Charles Libove, ST11:Nov 75:2205: 11714
Design of I-Shaped Beams with Diaphragm Bracing, Samuel J. Errera and Tamirisa V.S.R. Apparao, ST4:Apr 76:769:12051
Design of I-Shaped Columns with Diaphragm Bracing, Samuel J. Errera and Tamirisa V.S.R. Apparao, ST9:Sept 76:1685:12397
Design of Reinforced Concrete Spandrel Beams, Thomas T.C. Hsu and Kenneth T. Burton, ST1:Jan 74:209:10277
Ductile Behavior of Coupled Shear Walls, Thomas Paulay and Arumbakkam R. Santhakumar, ST1:Jan 76:93:11852
Effective Stress-Strain-Strength Model for Soils, Jean-Herve Prevost and Kaare Hoeg, GT3:Mar 75:259: 11157
Elastoplastic Stress-Strain Theory for Cohesionless Soil, Poul V. Lade and James M. Duncan, GT10: Oct 75:1037:11670
Failure Hypothesis for Masonry Shear Walls, Felix Y. Yokel and S. George Fattal, ST3:Mar 76:515: 11992
Initial Stresses in Natural Slope Analysis, Robin N. Chowdhury, GT76:Aug 76:404
Libby Dam Left Abutment Rock Wedge Stability, James V. Hamel, GT76:Aug 76:361
Measurement of In Situ Strength, John H. Schmertmann, GT75:June 75:II-57
New Design Procedure for Stability of Soft Clays, Charles C. Ladd and Roger Foott, GT7:July 74: 763:10664
On an Improved Application of Kotter's Equation, Hakuju Yamaguchi, Tsutomu Kimura and Nariaki Fuji-i, NMG:June 76:I-183
Pressuremeter and Laboratory Test Correlations for Clays, Robert G. Lukas and Bruno LeClerc de Bussy, GT9:Sept 76:945:12410
Punching Shear Strength of Restrained Slabs, Brian E. Hewitt and Barrington deV. Batchelor, ST9:Sept 75:1837:11548
Shear Behavior of Steel Frame Joints, Helmut Krawinkler, Vitelmo V. Bertero and Egor P. Popov, ST11:Nov 75:2317:11717
Shear Buckling of Square Perforated Plates, John F. Grosskurth, Jr., Richard N. White and Richard H. Gallagher, EM6:Dec 76:1025:12641
Shearing Strength of Kaolinite, Illite, and Montmorillonite, Roy E. Olson, GT11:Nov 74: 1215:10947
Shear Lag in Shallow Wide-Flanged Box Girders, Karl Van Dalen and Sanivarapu V. Narasimham, ST10:Oct 76:1969:12449
Shear Strength of Soils and Cyclic Loading, Gonzalo Castro Salas and John T. Christian, GT9:Sept 76: 887:12387
Shear Strength of Two-Way Bridge Slabs, Barrington deV. Batchelor and Ian R. Tissington, ST12:Dec 76:2315:12604
Stability Analysis of Cut Slopes at Auburn Dam, J. Lawrence Von Thun, GT76:Aug 76:349
Stability of Embankment on Clay, Tien H. Wu, William B. Thayer and Sheng S. Lin, GT9:Sept 75: 913:11584
Stabilization of Polluted Dredgings by Electro-Osmosis, Raymond J. Krizek, Francis B. Gularte and Paul L. Hummel, Preprint No.2641, Apr 76, 30pp.
Strength Decay of RC Columns under Shear Reversals, James K. Wight and Mete A. Sozen, ST5:May 75:1053:11311
Strength of Slab-Column Connections with Shear and Unbalanced Flexure, Robert Park and Shafiqul Islam, ST9:Sept 76:1879:12419
Tests on Slab-Column Connections with Shear and Unbalanced Flexure, Shafiqul Islam and Robert Park, ST3:Mar 76:549:11972
Thermal Analysis of Frozen Embankment Islands, Guy R. Bafus and Gary L. Guymon, WW2:May 76:123:12139
Time-Dependent Development of Strength in Dredgings, Raymond J. Krizek and Abdelsalam M. Salem, Preprint No.2640, Apr 76, 28pp.
Wood Shear Panels Bonded with Flexible Adhesives, John A. Richards, Robert P. Kerfoot and Gordon P. Krueger, ST1:Jan 75:131:11056

Shear Stress
Boundary Shear in Channel with Flood Plain, Robert C. Myers and Elsayed M. Elsawy, HY7:July 75: 933:11452
Boundary Shear Stress as an Index of Hydraulic Jump Performance, Ronald E. Nece and Khalid Mahmood, WW76:Aug 76:978
Boundary Shear Stress Measurement by Preston Tube, Malcolm Hollick, TN: HY7:July 76:1053: 12228
Finite Element Analysis of Stresses and Movements in Excavations, Hiromitsu Izumi, Katsumi Kamemura and Seiichi Sato, NMG:June 76:II-701
Impinging Circular Turbulent Jets, Spyridon Beltaos and Nallamuthu Rajaratnam, HY10:Oct 74:1313: 10852
Oblique Impingement of Plane Turbulent Jets, Spyridon Beltaos, HY9:Sept 76:1177:12388
Sewer Line Design Based on Critical Shear Stress, Kuan M. Yao, EE2:Apr 74:507:10480
Shear Analysis of Tapered Beams, Ken P. Chong, William D. Swanson and Robert B. Matlock, ST9: Sept 76:1781:12411
Shear Stresses in Beams with Discontinuity in Depth, John Marshall and Ravindra P. Jategaonkar, ST7: July 75:1393:11424
Stresses in GRP Cylinders with Radial Line Load, Fred C. McCormick and Richard T. Hunt, EM4: Aug 75:417:11520
Thick Plates on Elastic Foundations by Finite Elements, Otto J. Svec, EM3:June 76:461:12215
Turbulent Structure near Smooth Boundary, Paul H. Blinco and Daryl B. Simons, EM3:June 75:241: 11372

Shear Tests
Anisotropy for Finite Element Analysis, Ravikumar Bhaskaran, NMG:June 76:I-345
Constrained and Shear Moduli for Finite Element, Vincent P. Drnevich, GT5:May 75:459:11319
Dynamic Triaxial and Simple Shear Behavior of Sand, Ted K. Park and Marshall L. Silver, GT6: June 75:513:11347
Evaluation of Three Stress-Strain Models for Soils, Jean-Marie J. Vagneron, Poul V. Lade and Kenneth L. Lee, NMG:June 76:III-1329
Failure Hypothesis for Masonry Shear Walls, Felix Y. Yokel and S. George Fattal, ST3:Mar 76:515: 11992
Fundamentals of Liquefaction under Cyclic Loading, Geoffrey R. Martin, W. D. Liam Finn and H. Bolton Seed, GT5:May 75:423:11284
In-situ Shear Test for Rock Fills, Surendra P. Jain and Ramesh C. Gupta, GT9:Sept 74:1031:10823
Interpretation of Torsion Shear Tests on Sand, Poul V. Lade, NMG:June 76:I-381
Mahoning Dam Foundation Reevaluation, James V. Hamel, Stuart B. Long and Harry F. Ferguson, GT76:Aug 76:217
Shear-Bond Analysis of Steel-Deck-Reinforced Slabs, Max L. Porter, Carl E. Ekberg, Jr., Lowell F. Greimann and Hotten A. Elleby, ST12:Dec 76: 2255:12611
Shear Strength of Soils and Cyclic Loading, Gonzalo Castro Salas and John T. Christian, GT9:Sept 76: 887:12387
Soil Liquefaction by Torsional Simple Shear Device, Isao Ishibashi and Mehmet A. Sherif, GT8:Aug 74: 871:10752
Stability of Embankment on Clay, Tien H. Wu, William B. Thayer and Sheng S. Lin, GT9:Sept 75: 913:11584
Stabilization of Polluted Dredgings by Electro-Osmosis, Raymond J. Krizek, Francis B. Gularte and Paul L. Hummel, Preprint No.2641, Apr 76, 30pp.
Study of Deformation Characteristics and Analyses of Jointed Rock Masses, Ryuichi Iida, Koji Hojo and Kozo Saito, NMG:June 76:I-232
Time-Dependent Development of Strength in Dredgings, Raymond J. Krizek and Abdelsalam M. Salem, Preprint No.2640, Apr 76, 28pp.
Trapezoidally Corrugated Plates in Shear, M. Iqbal Hussain and Charles Libove, ST5:May 76:1109: 12159

Shear Waves
One-Dimensional Soil Transients by Characteristics, E. Benjamin Wylie and Victor L. Streeter, NMG: June 76:I-151

Sheet Erosion
Hydraulics of Slope Erosion by Overland Flow, Saburo Komura, HY10:Oct 76:1573:12489

Sheet Flow
Hydraulics of Sheet Flow in Wetlands, Bent A. Christensen, WW76:Aug 76:746

Sheeting
Rigid and Flexible Bracing Systems on Adjacent Sites, Richard G. Tait and Henry T. Taylor, CO2: June 75:365:11376

Sheet Piling
Curved Diaphragm Cellular Cofferdams, Jerome J. Cushing and Robert M. Moline, GT10:Oct 75:1055: 11669
Failure of Anchored Sheet Pile Walls, Bengt B. Broms and Hakan Stille, GT3:Mar 76:235:12000
Finite Element Analysis of Stresses and Movements in Excavations, Hiromitsu Izumi, Katsumi Kamemura and Seiichi Sato, NMG:June 76:II-701
Innovative Design at Florida Bulkhead Reduces Material and Construction Costs, Anthony A. Nolan, CE:May 76:81
Interlock Tension in Steel Sheet Piling, J. Neil Kay, ST10:Oct 75:2093:11638
Performance of a Cellular Sheetpile Wharf, Warren L. Schroeder, Dennis K. Marker and Thanasarn Khuayjarernpanishk, Preprint No.2731, Apr 76, 28pp.
Sheet Pile Interlock Tension-Probabilistic Design, James Neil Kay, GT5:May 76:411:12122
180-Ft. x 1000-Ft. Shipbuilding Dock for National Steel and Shipbuilding Company, Ronald A. Dahlin, Preprint No.2671, Apr 76, 15pp.

Shells (Structural Forms)
Analysis of Moderately Thick Shells of Revolution, John E. Goldberg, Yu-Kuang Tang and Divaker V. Pathak, ST4:Apr 75:821:11235
Analysis of Torispherical Pressure Vessels, Ganapathy V. Ranjan and Charles R. Steele, EM4: Aug 76:643:12335
Axisymmetrical Deformation of Bimodulus Orthotropic Circular Cylindrical Shell, Norio Kamiya, EM1:Feb 76:89:11916
Brick Masonry Shells, Clayford T. Grimm, ST1:Jan 75:79:11050
Buckling of Axially Loaded Open Shells, Tung H. Yang and Sidney A. Guralnick, EM2:Apr 76:199: 12055
Buckling of Cooling-Tower Shells: Bifurcation Results, Peter P. Cole, John F. Abel and David P. Billington, ST6:June 75:1205:11365
Buckling of Cooling-Tower Shells: State-of-the-Art, Peter P. Cole, John F. Abel and David P. Billington, ST6:June 75:1185:11364
Buckling of Cylindrical Shells by Wind Pressure, Yung-shih Wang and David P. Billington, EM5:Oct 74:1005:10874
Buckling Stress States of Cylindrical Shells, Ihsan Mungan, ST11:Nov 74:2289:10965
Buckling Stress States of Hyperboloidal Shells, Ihsan Mungan, ST10:Oct 76:2005:12465
The Computer in Shell Stability Analysis, Bo O. Almroth and James H. Starnes, EM6:Dec 75:873: 11811
Design of Hipped Hypar Shells, Ahmed Shaaban and Milo S. Ketchum, ST11:Nov 76:2151:12543
Discrete Model of Beams on Elastic Foundation, Gregory Szuladzinski, EM6:Dec 75:839:11814
Doubled-Curved Element for Mooney-Rivlin Membranes, John W. Leonard and Vijay K. Verma, EM4:Aug 76:625:12333

Finite Element Analysis of Doubly Corrugated Shells, Herbert A. Mang, C. V. Girya Vallabhan and Jimmy H. Smith, ST10:Oct 76:2033:12482
Gust Factors for Hyperbolic Cooling Towers, Mahendra P. Singh and Ajaya K. Gupta, ST2:Feb 76:371:11894
Latticed Structures: State-of-the-Art Report, Donald R. Sherman, Chmn., ST11:Nov 76:2197:12581
Local Buckling of Long-Span Concrete Folded Plates, Stuart E. Swartz and Vernon H. Rosebraugh, ST10: Oct 76:1981:12455
Local Buckling of Long-Span Folded Plates, Stuart E. Swartz, Vernon H. Rosebraugh and Guang-Nan Fanjiang, ST5:May 75:1097:11298
Membrane Solutions for Shells with Edge Constraint, Charles R. Steele, EM3:June 74:497:10605
Nonconforming Finite Element Analysis of Shells, Chang-Koon Choi and William C. Schnobrich, EM4:Aug 75:447:11504
Nonlinear Analysis of RC Shells of General Form, Cheng-Shung Lin and Alexander C. Scordelis, ST3: Mar 75:523:11164
Plastic Collapse of Folded Plate Structures, Morris N. Fialkow, ST7:July 75:1559:11465
Reinforced Concrete Hyperbolic Paraboloid Shells, Richard N. White, ST9:Sept 75:1961:11595
Simplified Theory of Thin Cylindrical Shells, Yung-shih Wang, Peter C.Y. Lee and David P. Billington, EM4:Aug 74:719:10720
Simulation of the Stress Computation in Shells, M. Salama and Senol Utku, Preprint No.2737, Sept 76, 32pp.
Stability of Half-Barrel Orthotropic Shells, Osman A. Marzouk and George Abdel-Sayed, ST7:July 75: 1517:11441
Stability of Hyperboloidal Shells, Daniel R. Veronda and Victor I. Weingarten, ST7:July 75:1585:11446
Stability of Shells Attached to An Elastic Core, Victor I. Weingarten and Yuan S. Wang, EM5:Oct 76:839:12492
Structural Economy of Certain Scalloped Shells, Ravindra K. Vyas and Sang Ho Do, ST76:Aug 76: 205
Thermal Loading of Thin-Shell Concrete Cooling Towers, Richard D Larrabee, David P. Billington and John F. Abel, ST12:Dec 74:2367:11002
TWA Hangars of Thin Shell Design, Roney A. Heinz, CE:Jan 75:55
Wave Forces on a Submerged Hemispherical Shell, Robert A. Naftzger and Subrata K. Chakrabarti, OE75:June 75:959

Shields
Subsidence Over Soft Ground Tunnel, Roger A. Butler and Delon Hampton, GT1:Jan 75:35:11074

Shields (Tunneling)
Half a Century Progress in Soft Ground Tunneling, George A. Fox and Louis E. Nicolau, CO4:Dec 76: 637:12622

Shipbuilding
180-Ft. x 1000-Ft. Shipbuilding Dock for National Steel and Shipbuilding Company, Ronald A. Dahlin, Preprint No.2671, Apr 76, 15pp.

Ship Maneuvering
Speed of Ships in Restricted Navigation Channels, R. Bryan Schofield, WW2:May 74:133:10539

Ships
Dynamic Effects of Ship Passage on Moored Vessels, Shen Wang, WW3:Aug 75:247:11501
Early Developments in American Concrete, Russell S. Fling, Preprint No.2791, Sept 76, 24pp.
The Influence of Water Depth on Ship Motion in Oblique Waves, C. H. Kim, OE75:June 75:653
Introduction to Colonial Ports, Richard L. Schultz, Preprint No.2774, Sept 76, 6pp.
Ju'aymah Crude Oil Loading Terminal, R. D. Lee, Preprint No.2642, Apr 76, 22pp.
Port of San Francisco, Robert L. Sloan, Preprint No.2783, Sept 76, 26pp.
Sinkage and Resistance for Ships in Channels, John S. McNown, WW3:Aug 76:287:12291
Speed of Ships in Restricted Navigation Channels, R. Bryan Schofield, WW2:May 74:133:10539
Thermal Effect Loads of Ships on Dock Floors, Greer W. Ferver and J. Richard Lawrence, Preprint No.2651, Apr 76, 10pp.

Shipyards
Floating Dry Dock Doubles as Launching Platform, Paul S. Crandall, CE:May 75:74

Shoaling
Assessment of Galveston Entrance Movable-Bed Model, William H. McAnnaly, Jr. and Joseph V. Letter, Jr., Preprint No.2661, Apr 76, 27pp.
Shoaling Rate Prediction Using a Sedimentation Tank, Craig H. Everts, OE75:June 75:294

Shoals
Shoaling Rate Prediction Using a Sedimentation Tank, Craig H. Everts, OE75:June 75:294

Shock
Construction Helmet Response Under Severe Impact, Werner Goldsmith, CO2:June 75:335:11349
Models of Geological Materials in Ground Shock, Ivan S. Sandler and Melvin L. Baron, NMG:June 76:I-219
Soil Island Approach to Structure/Media Interaction, Ivan Nelson and Jeremy Isenberg, NMG:June 76:I-41

Shock Resistance
Generalized Cap Model for Geological Materials, Ivan S. Sandler, Frank L. DiMaggio and George Y. Baladi, GT7:July 76:683:12243

Shopping Centers
Maintenance of Delivery Services for Chicago's State Street Transit Mall, Thomas P. Kaeser, BP75:Dec 75:528

Shore Protection
Analysis of Offshore Concrete Caisson Dikes under Cyclic Loading, John T. Christian and Jean M.E. Audibert, NMG:June 76:II-979
Analytical Prediction of Shoreline Erosion, John S. Fisher, Leif F. Gulbrandsen and Victor M. Goldsmith, OE75:June 75:161
Breakwater Back Slope Stability, James R. Walker, Robert Q. Palmer and James W. Dunham, OE75: June 75:879
Coastal Engineering—State-of-the-Art Summary, Kiyoshi Horikawa, OE75:June 75:217
Conditional Expected Tsunami Inundation for Hawaii, Wm. Mansfield Adams, WW4:Nov 75:319: 11702
Experience with the Offset Surfaces Breakwater, E. Douglas Sethness, Jr., Walter L. Moore and James E. Dailey, OE75:June 75:677
Extreme Wind, Wave and Tide, Cheng Y. Yang, Mehmet Aziz Tayfun and M. H. Fallah, OE75:June 75:134
Field Performance of Permeable Breakwater, John C. Ludwick, Peter Fleischer, Ronald E. Johnson and Gerald L. Shideler, WW4:Nov 75:357:11703
Lake Erie Airport Study — A Status Report, Herbert R. Crawford, Preprint No.2635, Apr 76, 27pp.
Longshore Currents and Sand Transport on Beaches, Paul D. Komar, OE75:June 75:334
Optimizing the Selection of Marine Retaining Walls, Robert C. Johnston, Max Bernheimer and Dominic A. Zarrella, Preprint No.2710, Apr 76, 28pp.
Probabilistic Approach to Design of Riprap for River Bank Protection, Ruh-Ming Li, Daryl B. Simons, Paul H. Blinco and Md. Abdus Samad, WW76:Aug 76:1572
Recurrence Intervals of Abnormally High Tides by Superposition of Storm Surges over Astronomical Tides, Raymond K. DeYoung and James R. Pfafflin, OE75:June 75:79
Response of the Mississippi River to the Cutoffs, Brien R. Winkley, WW76:Aug 76:1267

River-Ice Problems: A State-of-the-Art Survey and Assessment of Research Needs, John F. Kennedy, Cochmn. and George D. Ashton, Cochmn., HY1: Jan 74:1:10281
Suspended Sediment in Chesapeake Bay, J. R. Schubel, OE75:June 75:245
Transient Drainage Flow Analysis for a Coastal Site, Yung-chi Chang and Yun-jui Tsai, OE75:June 75: 1046

Shores
Analytical Prediction of Shoreline Erosion, John S. Fisher, Leif F. Gulbrandsen and Victor M. Goldsmith, OE75:June 75:161

Shoring
Bailey's Crossroads Collapse Reviewed, Ingvar Schousboe, CO2:June 76:365:12186
Legal Aspects of Open Cut Construction, Louis Cantor, Robert A. Rubin and Eugene H. Goldberg, CO4:Dec 75:923:11767
OSHA Trenching and Shoring Standards, George E. Mason and Steven Shimp, CO2:June 75:377:11377
Performance of Tied-Back Walls in Clay, G. Wayne Clough and Yuet Tsui, GT12:Dec 74:1259:11028
Tied-Back Deep Excavations in Los Angeles Area, Perry A. Maljian and James L. Van Beveren, CO3: Sept 74:337:10791

Shotcrete
Tunnel under Alps Uses New, Cost-Saving Lining Method, Ladislaus v. Rabcewicz, CE:Oct 75:66

Shrinkage
Creep and Shrinkage in Reactor Containment Shells, Zdenek P. Bazant, Domingo J. Carreira and Adolf Walser, ST10:Oct 75:2117:11632

Shuttle Services
San Diego-Coronado Bay Bridge: Bicycle Shuttle Service, Gene Pound and Alan McCuen, BP75:Dec 75:326

Sidewalks
Bike and Pedestrian Pathways, CE:Nov 75:72

Sight
Class I Bikeway Geometrics, Thomas H. Crawford, BP75:Dec 75:308

Sight Distances
Class I Bikeway Geometrics, Thomas H. Crawford, BP75:Dec 75:308
New Safety and Service Guides for Sight Distance, Ronald C. Pfefer, TE4:Nov 76:683:12517

Signals
Location and Capacity of Unsignalized Exits, Ezra Hauer, TE2:May 75:179:11291
Progress in Signaling for Track Guided Systems, Alastair D. McAulay, TE4:Nov 75:621:11695

Signs
Planning Criteria for Bikeways, Vincent R. Desimone, TE3:Aug 73:609:9928

Silos
Experimental Methods and Instrumentation for Power Generation Structures — Some Case Studies, Joseph W. Fortey and Raymond R. Funk, Preprint No.2717, Apr 76, 25pp.

Silting
The Yellow River: Its Unique Features and Serious Problems, Tsung-Lien Chou, WW76:Aug 76:507

Silts
Calculation of Raft Foundations on Clayey Silts, Quirin Laumans and Hermann Schad, NMG:June 76:1-475
Effects of Straining on Shear Modulus of Clays, Donald G. Anderson and Frank E. Richart, Jr., GT9:Sept 76:975:12428
Marine Sediment Pollution Study by Electric Conductivity Method, Mian-Chang Wang, David H. Killoy and Vito A. Nacci, Preprint No.2664, Apr 76, 19pp.
New York's Glacial Formation of Varved Silt and Clay, James D. Parsons, GT6:June 76:605:12218
Nonpoint Sources of Pollution: A Federal Perspective, Mark A. Pisano, EE3:June 76:555: 12211
Predicting Deformation in the Fort Union Formation, Van A. Silver, Samuel P. Clemence and Richard W. Stephenson, GT76:Aug 76:13
Silt Curtains for Dredging Turbidity Control, Edward E. Johanson, DIEE:Jan 76:990
Strain Rate Behavior of Compacted Silt, Nikhilesh Roy and Parth Sarathi, GT4:Apr 76:347:12024

Similarities
Verification of Hydroelastic Similitude Criteria, Otto Haszpra, HY4:Apr 76:469:12048

Similitude
Similitude in Coastal Engineering, Bernard Le Mehaute, WW3:Aug 76:317:12293
Similitude in Free-Surface Vortex Formations, Larry L. Daggett and Garbis H. Keulegan, HY11:Nov 74: 1565:10941
Verification of Hydroelastic Similitude Criteria, Otto Haszpra, HY4:Apr 76:469:12048

Simulation
Bidding Models: Truths and Comments, Michael Fuerst, CO1:Mar 76:169:11991
Computation of Flow through Masonboro Inlet, N.C., Michael Amein, WW1:Feb 75:93:11124
Coupled Optimization-Simulation Water Quality Model, A. Bruce Bishop and William J. Grenney, EE5:Oct 76:1071:12452
Detention Storage Control Strategy Development, Harry G. Wenzel, Jr., John W. Labadie and Neil S. Grigg, WR1:Apr 76:117:12070
A General Function for Stress-Strain Curves, Chandrakant S. Desai and Tien H. Wu, NMG:June 76:1-306
Ground-Water Recharge Simulation, Abnish C. Amar, HY9:Sept 75:1235:11588
Irrigation Return Flow Modeling for the Souris Loop, Richard W. Ribbens and Marvin J. Shaffer, IR76: July 76:545
Levee System Reliability Along a Confluence Reach, Ferenc Szidarovsky, Lucien Duckstein and Istvan Bogardi, EM5:Oct 75:609:11621
Maximum Response Statistics for Yielding Oscillator, Nilesh C. Chokshi and Loren D. Lutes, EM6:Dec 76:983:12632
Modeling of Health Care Delivery, Jeng Wen Hwang and Milton E. Harr, UP1:Aug 76:157:12345
Nonlinear Channel Routing by Computer, Michael C. Quick and Anthony Pipes, HY6:June 75:651:11353
QUURM — Implications for the Design of Urban Drainage Systems, W. Edgar Watt, Kenneth C. Wilson and Joan E. Eaton, IR76:July 76:580
Response to Stochastic Wind of N-Degree Tall Buildings, William E. Saul, P. Jayachandran and Alain H. Peyrot, ST5:May 76:1059:12112
River Basin Model for Simulating Flood Control Alternatives, Norbert L. Ackermann and Hiro Shigai, WW76:Aug 76:348
River Water Quality: Simulation Models or Optimization Techniques, Swami Marcondes Villela, WW76:Aug 76:305
Simulated Earthquake Tests of R/C Frames, Shunsuke Otani and Mete A. Sozen, ST3:Mar 74: 687:10435
Simulation Model for Tunnel Construction Costs, Fred Moavenzadeh and Michael J. Markow, CO1: Mar 76:51:11967
Simulation of Agricultural Runoff, Anthony S. Donigian, Jr. and Norman H. Crawford, Preprint No.2670, Apr 76, 27pp.
Simulation of Future River Fluctuations, Douglas D. Speers, WW76:Aug 76:608

Simulation of Hydraulic Processes in Open Channels, Chao-Lin Chiu, Hsin-Chi Lin and Kazumasa Mizumura, HY2:Feb 76:185:11905
Simulation of N-Degree Stochastic Wind Force Vector for the Three-Dimensional Dynamic Analysis of Tall Buildings, P. Jayachandran and William E. Saul, ST76:Aug 76:269
Simulation of Quality of Urban Drainage Effluents, Jiri Marsalek, IR76:July 76:564
Simulation of Shoreline and Nearshore Currents, Tamio Sasaki, OE75:June 75:179
Simulation of Water Quality in Tarawera River, J. Christopher Rutherford and Michael J. O'Sullivan, EE2:Apr 74:369:10461
Simulation of Water Quality Management Policies, John W. Hyden, James A. Chisman and Hugh H. Macaulay, EE4:Aug 75:623:11524
Staging of Improvements to Air Transport Terminals, Angus J. McKenzie, Jack W.E. Huggett and Kenneth W. Ogden, TE4:Nov 74:855:10920
Steady-State Water Quality Modeling in Streams, Robert Willis, Donald R. Anderson and John A. Dracup, EE2:Apr 75:245:11246
Structural System Failure Analysis in a High Load Environment, Jon D. Collins, ST76:Aug 76:39
Systems Analysis and Solid Waste Planning, Robert M. Clark and James I. Gillean, EE1:Feb 74:7:10316
Use of Simulation in Airport Planning and Design, Dana E. Low, TE4:Nov 74:985:10954
Wastewater Storage-Simulation of Instream Effects, John S. Tapp, EE6:Dec 76:1151:12601

Simulation Models
Interactive Simulation for Water System Dynamics, Neil S. Grigg and Maurice C. Bryson, UP1:May 75: 77:11313
Simulation Model for Evapotranspiration of Wheat: Empirical Approach, Daniel Shimshi, Dan Yaron, Eshel Bresler, Mordechai Weisbrod and Gad Strateener, IR1:Mar 75:1:11170
Simulation Model for Evapotranspiration of Wheat: Effect of Evaporative Conditions, Gad Strateener, Dan Yaron, Eshel Bresler and Daniel Shimshi, IR1: Mar 75:13:11169
Simulation of Shoreline and Nearshore Currents, Tamio Sasaki, OE75:June 75:179

Sinkage
Sinkage and Resistance for Ships in Channels, John S. McNown, WW3:Aug 76:287:12291

Sinkholes
Failures in Limestones in Humid Subtropics, George F. Sowers, GT8:Aug 75:771:11521
Reinforced Earth Bridges Highway Sinkhole, Ronald S. Steiner and Edward J. Trojan, CE:July 75:54

Siphons
Low-Head Air Regulated Siphons, Christopher R. Head, HY3:Mar 75:329:11155

Site Evaluation
Existing and Planned Energy Complexes, Kenneth R. Broome, EFEEC:Aug 75:24
Facility Location Example of Evaluation Methodology, John S. Hoffman, TE4:Nov 75:817: 11727
Inland Site Location in the Northeast with Emphasis on Water Supply Needs, Clarence N. Freeman and John H. Dixon, EFEEC:Aug 75:92
The Nuclear Energy Center Impact on Land Use, Frank A. Jenkins, EFEEC:Aug 75:73
Regional and Local Siting Problems with Emphasis on Overall Environmental Impact — Introduction, Charles A. Dewey, Jr., EFEEC:Aug 75:46
Session III — Water Supply and Cooling, David R. Helwig, EFEEC:Aug 75:412
Session I — Objectives (Introduction), Jan C. Philips, EFEEC:Aug 75:404
Session V —Ecology, C. Leland Rogers, EFEEC:Aug 75:417
Terrestrial Impact of Energy Complexes, Blaine E. Dinger, EFEEC:Aug 75:219

Site Investigation
Environmental Decision-Making and Facilities Siting, Michael S. Baram, EI2:Apr 76:211:12080
Facility Location Example of Evaluation Methodology, John S. Hoffman, TE4:Nov 75:817: 11727
Floating Nuclear Plants and Offshore Energy Centers, Thomas J. DiClemente, OE75:June 75:29
Historical Sites and the Construction Engineer, Mario G. Salvadori, CO2:June 76:295:12183
Ocean Engineering in the Design of Sea Islands, Michael J. McCarthy, Edward J. Schmeltz and Joseph Bonasia, OE75:June 75:762

Sites
New Approach to Site Selection Studies, W. Ray Seiple, PO1:July 74:63:10643

Site Selection
Civil and Environmental Engineering Aspects of Energy Complexes, Alvin S. Goodman, Editor, EFEEC:Aug 75
Civil Engineering Applications of Remote Sensing, David J. Barr and Wesley P. James, TE2:May 75: 279:11300
Energy Complexes — Conceptual Arrangements, Ralph W. Gunwaldson, EFEEC:Aug 75:19
Environmental Decision-Making and Facilities Siting, Michael S. Baram, EI2:Apr 76:211:12080
Existing and Planned Energy Complexes, Kenneth R. Broome, EFEEC:Aug 75:24
Facility Location Example of Evaluation Methodology, John S. Hoffman, TE4:Nov 75:817: 11727
Floating Nuclear Plants and Offshore Energy Centers, Thomas J. DiClemente, OE75:June 75:29
Flood Control for an Island Sited Nuclear Plant, Joel L. Caves, WW76:Aug 76:872
Inland Site Location in the Northeast with Emphasis on Water Supply Needs, Clarence N. Freeman and John H. Dixon, EFEEC:Aug 75:92
New Approach to Site Selection Studies, W. Ray Seiple, PO1:July 74:63:10643
New York Offshore Airport Feasibility Study, Lawrence Lerner, Preprint No.2634, Apr 76, 25pp.
Ocean Engineering in the Design of Sea Islands, Michael J. McCarthy, Edward J. Schmeltz and Joseph Bonasia, OE75:June 75:762
Progress Report of ASCE Ad Hoc Committee on Soil Structure Interaction, Izzat M. Idriss, STN75: Dec 75:II-236
Regional and Local Siting Problems with Emphasis on Overall Environmental Impact — Introduction, Charles A. Dewey, Jr., EFEEC:Aug 75:46
Some Factors Affecting Land Use for Energy Centers, Harry A. Kornberg, EFEEC:Aug 75:48
Terrestrial Impact of Energy Complexes, Blaine E. Dinger, EFEEC:Aug 75:219
Water and Power in the Northeast, Eugene O'Brien, Clarence N. Freeman and John H. Dixon, Preprint No.2688, Apr 76, 22pp.

Size
Analysis and Design of Griplam Nailed Connections, Ricardo O. Foschi and Jack Longworth, ST12:Dec 75:2537:11766
Instability, Ductility, and Size Effect in Strain-Softening Concrete, Zdenek P. Bazant, EM2:Apr 76:331:12042

Size Determination
Economic Pipe Sizing in Pumped Irrigation Systems, Roland P. Perold, IR4:Dec 74:425:10988

Skew Bridges
Skew and Elevated Support Effects on Curved Bridges, Donald W. Funkhouser and Conrad P. Heins, ST7:July 74:1379:10670

Skewness
Bending of Skew Orthotropic Plate Structures, John B. Kennedy and Davalath S.R. Gupta, ST8:Aug 76: 1559:12302

Skilled Workers
The Effect of Regulations on Productivity as Viewed by the Engineer, Billy T. Sumner, PROD:Aug 76: 219

Skin Effect
Recent Results in French Research on Reinforced Earth, Francois Schlosser and Nguyen-Thanh-Long, CO3:Sept 74:223:10800

Skin Friction
Large-Scale Model Test of Drilled Pier in Sand, Samuel P. Clemence and William F. Brumund, GT6:June 75:537:11369

Skull
Structural Modeling of Human Head, Sunder H. Advani and Raymond P. Owings, EM3:June 75: 257:11386

Skyscrapers
Fazlur Khan: A Look to the Sky, CE:July 76:69

Slab on Ground Construction
Design of Large Papermachine Mat Foundation, Anton W. Wegmuller, James H. Woodward and John R. Bayliss, ST1:Jan 76:231:11863

Slabs
Beam Analog for Plate Elements, M. Ezzat Mohsin and Edward E. Sadek, ST1:Jan 76:125:11844
Coefficients to Analyze Rectangular Slab Bridges, Iman Hossain, ST1:Jan 75:151:11048
Composite Construction Methods, John P. Cook, CO1:Mar 76:21:11975
Composite Steel-Deck Concrete Floor Systems, Reinhold M. Schuster, ST5:May 76:899:12116
Design Recommendations for Steel Deck Floor Slabs, Max L. Porter and Carl E. Ekberg, Jr., ST11:Nov 76:2121:12528
Ferrocement—Behavior in Tension and Compression, Colin D. Johnston and Samir G. Mattar, ST5:May 76:875:12104
Ferrocement—Material Behavior in Flexure, Colin D. Johnston and Dallas N. Mowat, ST10:Oct 74:2053: 10878
An Investigation of the Effective Width of the Reinforced Concrete T-Beam, Gajanan M. Sabnis and William D. Lord, Preprint No.2746, Sept 76, 30pp.
Minimum Cost Versus Minimum Weight of Prestressed Slabs, Antoine E. Naaman, ST7:July 76: 1493:12268
Numerical Analysis of Rigid Pavement Resting over Hookean Subgrade Continuum, Madan G. Arora and Sudarshan K. Khanna, NMG:June 76:I-511
A Numerical Method of Analysis of Foundation Plates, Alexander M. Gorlov, NMG:June 76:III-1371
Optimal Slabs and Grillages of Constrained Geometry, George I.N. Rozvany, Chinappa Gangadharaiah and Robin D. Hill, EM6:Dec 75: 755:11797
Polymer-Impregnated Concrete: Field Studies, Harshavardhan C. Mehta, John A. Manson, Wai F. Chen and John W. Vanderhoff, TE1:Feb 75:1: 11103
Shear-Bond Analysis of Steel-Deck-Reinforced Slabs, Max L. Porter, Carl E. Ekberg, Jr., Lowell F. Greimann and Hotten A. Elleby, ST12:Dec 76: 2255:12611
Strength of Slab-Column Connections with Shear and Unbalanced Flexure, Robert Park and Shafiqul Islam, ST9:Sept 76:1879:12419
Study of Three-Flight Free-Standing Staircases, Simon F. Ng and Alvar T. Chetty, ST7:July 75: 1419:11434
Tests on Slab-Column Connections with Shear and Unbalanced Flexure, Shafiqul Islam and Robert Park, ST3:Mar 76:549:11972

Slender Bodies
Dynamic Effects of Ship Passage on Moored Vessels, Shen Wang, WW3:Aug 75:247:11501

Slenderness Ratio
Buckling of Axially Loaded Open Shells, Tung H. Yang and Sidney A. Guralnick, EM2:Apr 76:199: 12055

Slime
Phosphorus Uptake by Biological Slimes, Alphonse E. Zanoni, EE6:Dec 76:1229:12621
Slime Holdup, Influent BOD, and Mass Transfer in Trickling Filters, Bernard Atkinson and John A. Howell, EE4:Aug 75:585:11505

Slipping
Earth Retention by Drilled Reinforced Concrete Caissons, Arthur H. Anderson, Jr., CE:Oct 76:54
Seismic Analysis of Underground Structural Elements, Hemant H. Shah and Shih-Lung Chu, PO1:July 74:53:10648

Slip Surface
Mechanics of the Frank Slide, John Krahn and Norbert R. Morgenstern, GT76:Aug 76:309
On the Distribution of Stress Around a Circular Tunnel Under Internal Pressure in Gravitating Plastic Ground with Frictional Resistance, Eiichi Oda and Takuo Yamagami, NMG:June 76:II-847

Slope Indicators
Investigation of Dynamic Taping, Bruce W. Golley and John Sneddon, SU2:Nov 74:115:10938

Slope Protection
Auburn-Foresthill Bridge Abutment Slope Stability, J. Lawrence Von Thun and Bruce M. Moyes, GT76: Aug 76:333

Slopes
Application of Stability Analyses to Slope Design, Umakant Dash, NMG:June 76:II-725
End Effects on Stability of Cohesive Slopes, Mohsen M. Baligh and Amr S. Azzouz, GT11:Nov 75:1105: 11705
Finite Element Analysis of Large Deformation in Slopes, Nimitchai Snitbhan and Wai F. Chen, NMG:June 76:II-744
Flow Characteristics of Sloping Channel Jumps, Nallamuthu Rajaratnam and Valupadas Mura Hari, HY6:June 74:731:10594
Free Surface Slopes at Controls in Channel Flow, David L. Wilkinson, HY8:Aug 74:1107:10753
Iterative Schemes for Slope Stability Analysis, Antonio Soriano, NMG:June 76:II-713
Plasticity Solutions for Slopes, Wai F. Chen and Nimitchai Snitbhan, NMG:June 76:II-731
Stability of Slopes by Logarithmic-Spiral Method, Yang H. Huang and Craig M. Avery, GT1:Jan 76: 41:11838

Slope Stability
Application of Stability Analyses to Slope Design, Umakant Dash, NMG:June 76:II-725
Auburn-Foresthill Bridge Abutment Slope Stability, J. Lawrence Von Thun and Bruce M. Moyes, GT76: Aug 76:333
Breakwater Back Slope Stability, James R. Walker, Robert Q. Palmer and James W. Dunham, OE75: June 75:879
Computerized Analysis of Rock Slope Stability, David S. Campbell, John T. Christian and Herbert H. Einstein, GT76:Aug 76:415
Earth Slope Reliability by a Level-Crossing Method, J. Morla Catalan and C. Allin Cornell, GT6:June 76:591:12214
Effects of Deforestation of Slopes, Colin E. Brown and Maw S. Sheu, GT2:Feb 75:147:11141
End Effects on Stability of Cohesive Slopes, Mohsen M. Baligh and Amr S. Azzouz, GT11:Nov 75:1105: 11705
Explicit Finite-Difference Methods in Geomechanics, Peter Cundall, NMG:June 76:I-132
Finite Element Analysis of Large Deformation in Slopes, Nimitchai Snitbhan and Wai F. Chen, NMG:June 76:II-744

Initial Stresses in Natural Slope Analysis, Robin N. Chowdhury, GT76:Aug 76:404
Iterative Schemes for Slope Stability Analysis, Antonio Soriano, NMG:June 76:II-713
Liquefaction Considerations in Nuclear Plant Design, Joseph L. Ehasz, Jr. and William F. Mercurio, STN75:Dec 75:II-142
Mild Slope Stable Channels — A Stochastic Design Approach, Bent A. Christensen, Preprint No.2680, Apr 76, 14pp.
Plasticity Solutions for Slopes, Wai F. Chen and Nimitchai Snitbhan, NMG:June 76:II-731
Roadside Slope Design for Safety, Eugene L. Marquis and Graeme D. Weaver, TE1:Feb 76:61:11922
Stability Analysis of Cut Slopes at Auburn Dam, J. Lawrence Von Thun, GT76:Aug 76:349
Stability of Slopes by Logarithmic-Spiral Method, Yang H. Huang and Craig M. Avery, GT1:Jan 76:41:11838
Stability of Vertical Corner Cut with Concentrated Surcharge Load, Max W. Giger and Raymond J. Krizek, GT1:Jan 76:31:11842
Wave Period Effect on the Stability of Riprap, John P. Ahrens and Bruce L. McCartney, OE75:June 75:1019

Slots
Suppression of Waves in Slotted-Walled Channel, Alfred M. Binnie, HY3:Mar 76:397:12006

Sludge
Chemical Sludge Dewatering on Sand Beds, John T. Novak and Gail E. Montgomery, EE1:Feb 75:1:11111
New and Conventional Engineering Uses of Fly Ash, Ramesh C. Joshi, Donald M. Duncan and Howard M. McMaster, TE4:Nov 75:791:11730
Optimal Control of Nitrogen Losses from Land Disposal Areas, Douglas A. Haith, EE6:Dec 73:923:10200
Transport Phenomena Applied to Sludge Dewatering, Peter Kos and Donald Dean Adrian, EE6:Dec 75:947:11781

Sludge Digestion
Feedlot Wastes to Useful Energy — Fact or Fiction?, Lawrence A. Schmid, EE5:Oct 75:787:11647
Pyrolysis as Means of Sewages Sludge Disposal, Nancy E. Folks, R. Addis Lockwood, Bert A. Eichenberger, Frank R. Bowerman and Kenneth Y. Chen, EE4:Aug 75:607:11518
Temperature Effects on Aerobic Digestion Kinetics, Clifford W. Randall, James B. Richards and Paul H. King, EE5:Oct 75:795:11646

Sludge Disposal
Diffusion and Mixing Processes of an Ocean (Abstract), Abhimanyu Swain, Harold D. Palmer and Kent T.S. Tzou, OE75:June 75:1436
Energy-Wastewater Treatment and Solids Disposal, William F. Garber, George T. Ohara and Sagar K. Raksit, EE3:June 75:319:11357
Lime Recovery and Reuse in Primary Treatment, Denny S. Parker, Geoffrey A. Carthew and Gerry A. Horstkotte, EE6:Dec 75:985:11789
Monitoring Sludge Disposal — Mid-Atlantic Shelf, Geraldine V. Cox, Steven A. Townsend and Priya Wickramarante, OE75:June 75:1314
New Gravity/Pressure Unit Cuts Sludge Dewatering Costs, Eugene E. Dallaire, CE:Jan 76:69
Role of Nitrogen in Activated Sludge Process, Yeun C. Wu, EE5:Oct 76:12454
Trickling Filter-Activated Sludge Combinations, Robert F. Roskopf, James C. Young and E. Robert Baumann, EE5:Oct 76:1005:12460

Sludge Drying
Chemical Sludge Dewatering on Sand Beds, John T. Novak and Gail E. Montgomery, EE1:Feb 75:1:11111
New Gravity/Pressure Unit Cuts Sludge Dewatering Costs, Eugene E. Dallaire, CE:Jan 76:69
Transport Phenomena Applied to Sludge Dewatering, Peter Kos and Donald Dean Adrian, EE6:Dec 75:947:11781

Sludge Treatment
Design and Operation Model of Activated Sludge, Joseph H. Sherrard and Alonzo W. Lawrence, EE6:Dec 73:773:10220
Trickling Filter-Activated Sludge Combinations, Robert F. Roskopf, James C. Young and E. Robert Baumann, EE5:Oct 76:1005:12460

Slurries
At-Rest Lateral Earth Pressure of Consolidating Clay, M. Salah Abdelhamid and Raymond J. Krizek, GT7:July 76:721:12240
New Foundations in an Old Neighborhood, Edmund G. Johnson, CE:Nov 76:50

Small Watersheds
Low Flow Modeling in Small Steep Watersheds, David S. Bowles and J. Paul Riley, HY9:Sept 76:1225:12405
Morphology of Cobble Streams in Small Watersheds, Ruh-Ming Li, Daryl B. Simons and Michael A. Stevens, HY8:Aug 76:1101:12304
Prediction of Flood Volume from Small Humid Region Watersheds, Sie Ling Chiang, HY7:July 75:817:11466

Snow
Augmentation of 1968-1972 Winter Storms in New Mexico, Conrad G. Keyes, Jr., HY12:Dec 76:1725:12616
Effect of Snow Cover on Upward Movement of Soil Moisture, Eugene L. Peck, IR4:Dec 74:405:10989
Hydrology of Patch Cuts in Lodgepole Pine, James R. Meiman and Thomas L. Dietrich, IR1:Mar 75:41:11197
Sewage Effluent Turned to Snow: Provides Storage, Removes Pollutant, Kenneth R. Wright, CE:May 76:88

Snowmelt
Emergency Assistance on Flood Damage in North Dakota Under Section 216 of the Flood Control Act of 1950, A. Richard Moum, IR76:July 76:76
Simulation of Agricultural Runoff, Anthony S. Donigian, Jr. and Norman H. Crawford, Preprint No.2670, Apr 76, 27pp.

Snowpacks
Sewage Effluent Turned to Snow: Provides Storage, Removes Pollutant, Kenneth R. Wright, CE:May 76:88

Social Aspects
The Code of Ethics of the American Society of Civil Engineers, Mario G. Salvadori, EI2:Apr 75:215:11252
Dredged Material Disposal: Social Costs and Other Externalities, R. M. Pope, DIEE:Jan 76:398
Effectiveness of Present Operating Procedures and of the PAC Structure, Leland J. Walker, EI2:Apr 75:247:11268
Evaluating the Quality of Constructed Environments, Rudolf H. Moos and Bernice S. Moos, EFAN:Dec 74:143
Social Aspects of Planning, Gene E. Willeke, Preprint No.2754, Sept 76, 22pp.
Summary for Session III—Health Delivery Systems, Jack L. Mahan, Jr., EFAN:Dec 74:252
Systems Analysis in Evaluating the Economics of New and Maintenance Dredging Projects, William W.L. Lee, DIEE:Jan 76:364

Social Communication
Communication Goals for Science and Engineering, S. H. Wittwer, EI2:Apr 76:183:12087

Social Impact
Federal Manpower in Water Resource Engineering, Edward R. Lewandowski, WR2:Nov 76:185:12533

Modeling Social Impacts of Urban Highways, David C. Colony and Abul B. Shah Alam, TE2:May 76: 395:12148
Trouble in Paradise, Harry E. Schwarz and Maria R. Eigerman, HY5:May 75:603:11296
Urban Freeways and Changing Social Values, Kneeland A. Godfrey, Jr., CE:May 75:80
Urban Life and Tall Buildings, Lynn S. Beedle, TN: UP1:Aug 76:237:12336

Social Needs

ASCE Local Level Public Service Actions Have Big Impact, Virginia Fairweather, CE:June 75:51
Back to the People: Dallas' Blueprint for the 21st Century, Michael J. McManus, CE:July 76:57
Changing Responsibilities of the Professional Engineer in Public Works, James L. Ogilvie, EI3: July 76:345:12275
Citizen Participation: Assessing Public Attitudes, Desmond M. Connor, CE:Oct 75:78
Civil Engineering Management - Prerequisites and Objectives, Eugene J. Peltier, EI1:Jan 75:5:11060
Dredged Material Disposal: Social Costs and Other Externalities, R. M. Pope, DIEE:Jan 76:398
Economic and Social Issues of Our Cities, Phillip Hammer, UP1:Aug 76:69:12354
The Engineer's Response to Nonengineering Criticism of His Professional Work, John E. Spitko, Jr., EI1:Jan 75:1:11062
Environmental Impact Reports: Problems and Opportunities, Robert L. Jones, CE:May 75:71
Grantspersonship Roundtable Minutes, Ira N. Pierce, BP75:Dec 75:587
Greater Lawrence Transportation Improvements Study, Maurice Freedman, Preprint No.2763, Sept 76, 30pp.
Identifying the Publics in Water Resource Planning, Gene E. Willeke, WR1:Apr 76:137:12064
Integrating Evaluation at the Project Scale, Alan M. Voorhees, UP1:Aug 76:35:12351
Irrigation Development in Bangladesh, Stephen V. Allison and Kazi F. Jalal, IR1:Mar 74:69:10394
Legislative Impacts on Dredging — General Regulatory Functions, Charles W. Hollis, DIEE:Jan 76:1
Method for Minority Contractor Participation, Ariel E. Morelli, CO3:Sept 76:449:12373
Multiobjective Planning: New Directions and Methodology, A. Bruce Bishop, Mac McKee, T. Ward Morgan and Rangesan Narayanan, Preprint No.2715, Apr 76, 26pp.
Predicting Demand for Engineered Facilities, James P. Romualdi, EI3:July 75:365:11426
The Professional Engineer Half a Century Hence, Alfred C. Ingersoll, CE:Mar 75:74
Public Versus Client Interests - An Ethical Dilemma for the Engineer, Terry L. Turnock, EI1:Jan 75:61: 11083
Systems Analysis in Evaluating the Economics of New and Maintenance Dredging Projects, William W.L. Lee, DIEE:Jan 76:364
Theory and Practice of Public Participation in Planning, Gene E. Willeke, IR1:Mar 74:75:10391
A Tool for Improving Social Service Delivery Systems in Urban Areas, Allen E. Shinder and Martin L. Reiss, BP75:Dec 75:366
We Created the Problem; Only We Can Solve It!, Jack R. Janney, EI3:July 75:429:11436

Social Participation

Action Program for Elimination of Unethical Practices in the Engagement of Professional Services, John W. Frazier, Chmn., EI2:Apr 75:267: 11210
Back to the People: Dallas' Blueprint for the 21st Century, Michael J. McManus, CE:July 76:57
Changing Responsibilities of the Professional Engineer in Public Works, James L. Ogilvie, EI3: July 76:345:12275
Citizen Inputs to Public Works Projects, Desmond M. Connor, EI1:Jan 76:29:11856
Citizen Participation: Assessing Public Attitudes, Desmond M. Connor, CE:Oct 75:78
Citizens Groups and Public Participation: Problems and Observations, Jonathan N. Brownell, EFEEC: Aug 75:388
Community Acceptance of Highway Corridor Development, Douglas Nunn, EI3:July 75:337: 11414
Community Development Implications of Energy Complex Construction, C. R. Cavanagh, EFEEC: Aug 75:280
Comprehensive Water Quality Management Planning, Kenneth A. Bartal and Leonardo V. Gutierrez, Jr., HY4:Apr 75:371:11263
Computer Location of Bikeways, William L. Smith and Jerry S. Murphy, BP75:Dec 75:66
Conference Review and Evaluation, David G. Ellingson, EFAN:Dec 74:287
Conowingo-Peach Bottom Energy Complex: Financial, Legal and Public Relations Aspects, W. H. Johnson, EFEEC:Aug 75:292
Consultants Reviewing Plans of Other Consultants in Fairfax County, Va.; Landslides Greatly Reduced, Eugene E. Dallaire and C. S. Coleman, CE:Sept 76: 77
The Dallas/Fort Worth Airport Project, Raymond J. Hodge, Preprint No.2703, Apr 76, 10pp.
The Engineering and Minority Community in Symbiosis, Sol E. Cooper, EI2:Apr 76:217:12078
Engineers and Public Participation in Water Resources Development, Edward Silberman, Preprint No.2668, Apr 76, 22pp.
Evaluation and Implementation of Urban Drainage Projects, Neil S. Grigg, UP1:May 75:61:11324
Factoring in Public Participation: Suggestions for Industry, Henry Herrmann, EFEEC:Aug 75:394
Genesee Expressway Corridor Analysis, Lawrence H. Lehman, Robert J. Trapani and Philip A. Habib, TE4:Nov 75:781:11726
Greater Lawrence Transportation Improvements Study, Maurice Freedman, Preprint No.2763, Sept 76, 30pp.
Identifying the Publics in Water Resource Planning, Gene E. Willeke, WR1:Apr 76:137:12064
Irrigation Development in Bangladesh, Stephen V. Allison and Kazi F. Jalal, IR1:Mar 74:69:10394
Keynote Adress - Man as the Measure, Nathaniel A. Owings and Cabell Gwathmey, EFAN:Dec 74:5
Marseilles Lock Rehabilitation: Illinois Waterway, James P. Jones and Ralph E. Houck, WW76:Aug 76:249
New Approach to Site Selection Studies, W. Ray Seiple, PO1:July 74:63:10643
New Building Measures Needed in Order to Design for People, Calvin W. Taylor, EFAN:Dec 74:47
Political Involvement of Civil Engineers, Allen W. Hatheway, EI1:Jan 76:11:11866
Public Involvement and Participation — Open Planning, the Way of the Future, George R. Baumli, IR76:July 76:707
Public Participation and Energy Complexes: An Overview, Benjamin C. Dysart, III, EFEEC:Aug 75:365
Public Participation from a Utility's Viewpoint: Benefits and Problems, Henry W. Cheney, EFEEC: Aug 75:373
Public Participation in Great Lakes Water Levels Regulation: Further Findings from the Public Hearing Held by the I.J.C. in 1973, A. P. Grima and C. Dufournaud, IR76:July 76:418
Public Participation in the Fuel Cycle: Experiences and Perspectives, Robert E. Olson, EFEEC:Aug 75: 381
Public Response to Carpooling Programs, Alice E. Kidder, Bruce Morgan and Arthur Saltzman, TE3: Aug 76:571:12340
Session VIII — Public Participation, Kenneth F. Rosanski, EFEEC:Aug 75:428
Session VI — Socio-Economic Problems, Conception Tan, EFEEC:Aug 75:421
Social and Environmental Concerns in Construction, Robert F. Borg, CO1:Mar 76:1:12007
Social Evaluation of Land-Use Controls, Morton Lustig, UP1:Aug 76:111:12356

Summary for the Keynote Session I - The Quality System in Construction, Wayne D. Veneklasen, EFAN:Dec 74:246
Theory and Practice of Public Participation in Planning, Gene E. Willeke, IR1:Mar 74:75:10391
Water Plan Ranking and the Public Interest, Leonard Ortolano, WR1:Apr 76:35:12068
We Created the Problem; Only We Can Solve It!, Jack R. Janney, EI3:July 75:429:11436
When Is A Political Contribution Influence Buying?, Thomas J. McCollough, EI1:Jan 76:1:11860
William D. Henderson: Man, Engineer, Priest Minister, Nhora I. Cortes-Comerer, CE:Mar 76:63

Social Perception
Text of Comments Regarding California's Legal Experience in the Liability of Public Interests, Robert W. James, EFRLD:Sept 75:115

Social Reforms
Progress Report on Development of A Code of Ethics, Marvin W. Runyan, EI2:Apr 75:199:11225

Social Sciences
Social Science Emphasis in Engineering Education, Dan H. Pletta, EI4:Oct 75:509:11664

Social Values
Affirmative Action Toward Equal Opportunity, Benito A. Sinclair, CE:Feb 75:69
Multiobjective Planning: Concepts and Methods, A. Bruce Bishop, Mac McKee, T. Ward Morgan and Rangesan Narayanan, WR2:Nov 76:239:12563
Multiobjective Planning: New Directions and Methodology, A. Bruce Bishop, Mac McKee, T. Ward Morgan and Rangesan Narayanan, Preprint No.2715, Apr 76, 26pp.
Social and Environmental Concerns in Construction, Robert F. Borg, CO1:Mar 76:1:12007

Socioeconomic Data
Energy Complexes: The Federal Government's Views, R. Michael Hartman, EFEEC:Aug 75:334
Processing Variable Forms for Travel Estimation, Jason C. Yu and Robert J. Popper, TE1:Feb 76:91:11938
Scope of Socio-Economics Considerations, E. J. Schmidt, EFEEC:Aug 75:272
Session VI — Socio-Economic Problems, Conception Tan, EFEEC:Aug 75:421

Sodium
Water Quality and Aquitard Permeability, James H. Hardcastle and James K. Mitchell, IR2:June 76:205:12203

Soil Analysis
Nonlinear Characterization and Analysis of Sand, Hon-Yim Ko and Raymond M. Masson, NMG:June 76:1-294

Soil Cement
Need for Estimated Cement Requirements for Stabilizing Lateritic Soils, Samuel A. Ola, TE2:May 74:379:10534

Soil Compaction
Stress-Strain Properties of Compacted Clays, David E. Daniel and Roy E. Olson, GT10:Oct 74:1123:10869

Soil Conservation
Estimation of Rainfall Erosion Index, John K.H. Ateshian, IR3:Sept 74:293:10817

Soil Dynamics
Characteristics Method for Liquefaction of Soils, E. Benjamin Wylie and Victor L. Streeter, NMG:June 76:II-938
Dynamic Analysis of Footings on Layered Media, Eduardo Kausel, Jose M. Roesset and Gunter Waas, EM5:Oct 75:679:11652
Dynamic Stiffness of Circular Foundations, Eduardo Kausel and Jose M. Roesset, EM6:Dec 75:771:11800
Equivalent Uniform Cycle Concept for Soil Dynamics, Mokhtar Annaki and Kenneth L. Lee, Preprint No.2752, Sept 76, 28pp.
Influence of Canyon on Soil-Structure Interaction, Hung L. Wong, Mihailo D. Trifunac and Kevin K. Lo, EM4:Aug 76:671:12328
Nonlinear Behavior in Soil-Structure Interaction, Eduardo Kausel, Jose M. Roesset and John T. Christian, GT11:Nov 76:1159:12579
Some Finite Element Solutions in the Dynamics of Circular Footings, S. P. Dasgupta and N. S.V. Kameswara Rao, NMG:June 76:II-1038

Soil Erosion
Estimation of Rainfall Erosion Index, John K.H. Ateshian, IR3:Sept 74:293:10817

Soil Investigations
In Situ Soils Measuring Devices, Roney A. Heinz, CE:Oct 75:62
In Situ Soils Measuring Devices — Part II, CE:Dec 75:73

Soil Liquefaction
Comparison of Methods for Liquefaction Evaluation, Julio E. Valera and Neville C. Donovan, Preprint No.2752, Sept 76, 30pp.
Constitutive Laws for Sand in Dynamic Shear, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, NMG:June 76:I-270
Equivalent Uniform Cycle Concept for Soil Dynamics, Mokhtar Annaki and Kenneth L. Lee, Preprint No.2752, Sept 76, 28pp.
Evaluation of Soil Liquefaction Effects on Level Ground During Earthquakes, H. Bolton Seed, Preprint No.2752, Sept 76, 104pp.
Liquefaction Criteria for the Trans-Alaska Pipeline, Neville C. Donovan and Sukhmander Singh, Preprint No.2752, Sept 76, 30pp.
A Numerical Model for Liquefaction, Chyr Pyng Liou, Victor L. Streeter and Frank E. Richart, Jr., Preprint No.2752, Sept 76, 30pp.
Soil Liquefaction by Torsional Simple Shear Device, Isao Ishibashi and Mehmet A. Sherif, GT8:Aug 74:871:10752

Soil Mechanics
Accuracy of Numerical Solutions for Laterally Loaded Piles in Elastic Half-Space, Aldo Evangelista and Carlo Viggiani, NMG:June 76:III-1367
Analysis of Pressuremeter in Strain-Softening Soil, Jean-Herve Prevost and Kaare Hoeg, GT8:Aug 75:717:11488
Analysis of Shear-Induced Anisotropy in Leda Clay K. T. Law and Kwan Y. Lo, NMG:June 76:I-329
Anisotropy and Stress Reorientation in Clay Under Load, Hideki Ohta and C. Peter Wroth, NMG:June 76:I-319
Anisotropy for Finite Element Analysis, Ravikumar Bhaskaran, NMG:June 76:I-345
Dynamic Response of Embedded Machine Foundations, Kenneth H. Stokoe, II and Frank E. Richart, Jr., GT4:Apr 74:427:10499
Finite Element Analysis of Large Deformation in Slopes, Nimitchai Snitbhan and Wai F. Chen, NMG:June 76:II-744
Foundation Considerations for a Nuclear Power Plant, George A. Faillace, CO1:Mar 75:165:11181
Frost Heaves — A Major Dilemma for Ice Arenas, Bruce M. Thorson and J. S. Braun, CE:Mar 75:62
Influence of Soil Models on Seismic Response, Adekunle Oguntala, NMG:June 76:II-1060
Interpretation of Torsion Shear Tests on Sand, Poul V. Lade, NMG:June 76:I-381
Iterative Improvement of Finite Element Approximations, Ranbir S. Sandhu, U. Salaam and K. J. Singh, NMG:June 76:I-104
Marine Soil Mechanics and Foundations II, State-of-the-Art Summary, Anton L. Inderbitzen, OE75:June 75:486

Massive Compaction of Granular Soil — How We Stand, Henry W. Janes and Robert D. Anderson, Preprint No.2777, Sept 76, 28pp.
Micromechanics Model for Creep of Anisotropic Clay, Zdenek P. Bazant, I. Kutay Ozaydin and Raymond J. Krizek, EM1:Feb 75:57:11138
Nonlinear Analyses in Soil and Solid Mechanics, Hugh L. Davidson and Wai F. Chen, NMG:June 76:I-205
Non-Linear Elastic Approximations of the Behaviour of Soils, Arnold Verruijt, NMG:June 76:III-1321
Numerical Treatment of Some Geomechanical Problem Areas in Oil and Natural Gas Production, Jan Geertsma, NMG:June 76:II-759
On the Distribution of Stress Around a Circular Tunnel Under Internal Pressure in Gravitating Plastic Ground with Frictional Resistance, Eiichi Oda and Takuo Yamagami, NMG:June 76:II-847
Photoelastic Analysis of a Cofferdam, Naveed K. Burki and Rowland Richards, Jr., GT2:Feb 75:129:11135
Plasticity Solutions for Slopes, Wai F. Chen and Nimitchai Snitbhan, NMG:June 76:II-731
Probabilistic Analysis and Design of a Retained Wall, Kaare Hoeg and Ramesh P. Murarka, GT3:Mar 74:349:10436
Saturated Sand as Inelastic Two-Phase Medium, Zdenek P. Bazant and Raymond J. Krizek, EM4:Aug 75:317:11508
Sea Cliff Base Erosion, San Diego, California, Louis J. Lee, Charles Pinckney and Charles Bemis, Preprint No.2708, Apr 76, 14pp.
Settlement of Building on Pile Foundation in Sand, Robert M. Koerner and Antal Partos, GT3:Mar 74:265:10405
Stability of Structures with Intermediate Filters, Amrik S. Chawla, HY2:Feb 75:223:11139
Stress-Strain Properties of Compacted Clays, David E. Daniel and Roy E. Olson, GT10:Oct 74:1123:10869
Vibratory In Situ and Laboratory Soil Moduli Compared, Robert W. Cunny and Zelma B. Fry, SM12:Dec 73:1055:10219
Viscoplastic Constitutive Matrix Corresponding to the Hyperbolic Sine Creep Law, Guenter W. Borm, NMG:June 76:I-357

Soil Moisture

Effect of Snow Cover on Upward Movement of Soil Moisture, Eugene L. Peck, IR4:Dec 74:405:10989
Effects of Irrigation Scheduling and Coordinated Delivery on Irrigation and Drainage Systems, Roy D. Gear, Arnold S. Dransfield and Melvin D. Campbell, Preprint No.2720, Apr 76, 18pp.
The Hydrology of the Upper 12-in. (30-cm) of Well-Drained, Imperfectly Drained, and Poorly Drained Mineral Soil Profiles, Peter S. Chisholm and Robert W. Kirkness, IR76:July 76:193
Prediction of Flood Volume from Small Humid Region Watersheds, Sie Ling Chiang, HY7:July 75:817:11466
Review of Expansive Soils, Gerald J. Gromko, GT6:June 74:667:10609
Soil Moisture Movement by Temperature Gradient, Arved J. Raudkivi and Nguyen Van U'u, GT12:Dec 76:1225:12645
Water Yield Model Using SCS Curve Numbers, Jimmy R. Williams and William V. LaSeur, HY9:Sept 76:1241:12377

Soil Moisture Movement

Field Measurement of Permeability in Soil and Rock, Victor Milligan, GT75:June 75:II-3

Soil Physical Properties

In Situ Soils Measuring Devices, Roney A. Heinz, CE:Oct 75:62

Soil Pressure

Concrete Pipe Culvert Behavior - Part 2, Raymond Eugene Davis and Alfred E. Bacher, ST3:Mar 74:615:10408
Effect of Uplift on Soil-Structure Interaction and Toe Pressure Calculation, Dale R. Bervig and Chang Chen, STN75:Dec 75:II-351
In Situ Soils Measuring Devices, Roney A. Heinz, CE:Oct 75:62
Session 6: Soil Structure Interaction — Dynamic Soil Pressure, John Lysmer, STN75:Dec 75:II-171
Soil Pressure and Overturning Analyses of Structures Under Three Directional Seismic Loads by Using SRSS Combination, Frank J. Hsiu, STN75:Dec 75:II-331

Soil Properties

Analysis and Design of Laterally Loaded Piles and Caissons in a Layered Soil System, Tarun R. Naik and Alain H. Peyrot, ST76:Aug 76:589
Bearing Capacity of Offshore Gravity Structures, Surendra K. Saxena, W. M. Kilkenny and Joseph A. Fischer, OE75:June 75:450
Collapsible Soils, John P. Bara, Preprint No.2797, Sept 76, 12pp.
Consideration of Finite Element Representation, H. Bolton Seed, STN75:Dec 75:II-246
Consolidation of Thick Beds of Clay, Pasquale De Simone and Carlo Viggiani, NMG:June 76:II-1067
A Constitutive Equation for Normally Consolidated Clays, Toshihisa Adachi, NMG:June 76:I-282
Engineering Behavior of Calcareous Clays, Vito A. Nacci, Mian-Chang Wang and Kenneth R. Demars, OE75:June 75:380
Explicit Finite-Difference Methods in Geomechanics, Peter Cundall, NMG:June 76:I-132
Flow at Interface of Two Anisotropic Soil Zones, Robin N. Chowdhury, TN: GT11:Nov 76:1195:12513
Fundamentals of Piping, Richard F. Flanagan, Preprint No.2766, Sept 76, 18pp.
Future Advances in Soil Placement and Improvement, J. Richard Bell, Preprint No.2775, Sept 76, 19pp.
Holding Capacity of Direct Embedment Anchors, Richard M. Beard and Homa J. Lee, OE75:June 75:470
The Hydrology of the Upper 12-in. (30-cm) of Well-Drained, Imperfectly Drained, and Poorly Drained Mineral Soil Profiles, Peter S. Chisholm and Robert W. Kirkness, IR76:July 76:193
Identification and Nature of Dispersive Soils, James L. Sherard, Lorn P. Dunnigan and Rey S. Decker, GT4:Apr 76:287:12052
Infiltration Into Increasingly Permeable Soils, Herman Bouwer, IR1:Mar 76:127:11959
In Situ Measurement of Initial Stress and Deformation Characteristics, C. Peter Wroth, GT75:June 75:II-181
In Situ Measurement of Soil Properties: Closing Remarks, Jorj O. Osterberg, GT75:June 75:II-357
In Situ Measurement of Volume Change Characteristics, James K. Mitchell and William S. Gardner, GT75:June 75:II-279
Integrated Study of Reinforced Earth—II: Behavior and Design, Chih-Kang Shen, Karl M. Romstad and Leonard R. Herrmann, GT6:June 76:577:12210
Limit Load of a Foundation in a Strain-Softening Soil, Paolo Biondi, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:I-591
Marine Soil Mechanics and Foundations II, State-of-the-Art Summary, Anton L. Inderbitzen, OE75:June 75:486
New Rheological Model for Soil Behavior, Fujiya Komamura and Rodney J. Huang, GT7:July 74:807:10675
Non-Linear Elastic Approximations of the Behaviour of Soils, Arnold Verruijt, NMG:June 76:III-1321
Numerical Analysis of Embankments over Soft Soils, Robert L. Thoms, Richard A. Pecquet and Ara Arman, NMG:June 76:II-623
A Numerical Model for Liquefaction, Chyr Pyng Liou, Victor L. Streeter and Frank E. Richart, Jr., Preprint No.2752, Sept 76, 30pp.
Numerical Treatment of Some Geomechanical Problem Areas in Oil and Natural Gas Production, Jan Geertsma, NMG:June 76:II-759

Properties of Soil in the San Fernando Hydraulic Fill Dams, Kenneth L. Lee, H. Bolton Seed, Izzat M. Idriss and Faiz I. Makdisi, GT8:Aug 75:801:11527
Relationship of Soil Moisture to the Dielectric Property, Ernest T. Selig and Sundru Mansukhani, GT8:Aug 75:755:11517
Relative Motion of Two Points during an Earthquake, John T. Christian, TN: GT11:Nov 76: 1191:12513
Saturated Sand as Inelastic Two-Phase Medium, Zdenek P. Bazant and Raymond J. Krizek, EM4: Aug 75:317:11508
Session 6: Soil Structure Interaction — Design Time-History, P. K. Agrawal, STN75:Dec 75:II-181
Session 6: Soil Structure Interaction — Finite Element, Lumped Parameter, John R. Hall, Jr., STN75:Dec 75:II-206
Session 6: Soil Structure Interaction — Nonlinear Effects, Eduardo Kausel, STN75:Dec 75:II-223
Site Investigation with Static Cone Penetrometer, Robert Alperstein and Samuel A. Leifer, GT5:May 76:539:12154
Soil Strength Improvement Through Reinforcement, Kenneth L. Lee, Preprint No.2806, Sept 76, 28pp.
Soil-Structure Interaction of Concrete Pipe Systems, Raymond J. Krizek, Ross B. Corotis and Thomas H. Wenzel, ST76:Aug 76:607
Stresses in Soils due to Vertical Load on Piles, Verendra Singh, NMG:June 76:I-451
The Threshold of Dilation Under Cyclic Loading, Robert D. Stoll and Lembit Kald, Preprint No.2752, Sept 76, 26pp.
Treatment of Soft Foundations — A Review of Current Practice, Ara Arman, Preprint No.2797, Sept 76, 36pp.
Uncertainties in Soil Structure Interaction, John T. Christian, STN75:Dec 75:II-105
Uniform Placement of Sand, Wayne A. Bieganousky and William F. Marcuson, III, GT3:Mar 76:229: 11985
Unsaturated Flow During Soil Treatment of Septic Tank Effluent, Johannes Bouma, EE6:Dec 75:967: 11783

Soil Resistivity

In Situ Soils Measuring Devices, Roney A. Heinz, CE:Oct 75:62
Reinforced Earth Bridges Highway Sinkhole, Ronald S. Steiner and Edward J. Trojan, CE:July 75:54

Soils

The Equivalent Length of a Pile or Caisson in Soil, Peter Kocsis, CE:Dec 76:63
Heat Transfer in Soil-Water-Ice Systems, Aditya Mohan, GT2:Feb 75:97:11123
Numerical Analysis of Embankments over Soft Soils, Robert L. Thoms, Richard A. Pecquet and Ara Arman, NMG:June 76:II-623
Seismic Risk Map, CE:Dec 76:59
Stability of Vertical Corner Cut with Concentrated Surcharge Load, Max W. Giger and Raymond J. Krizek, GT1:Jan 76:31:11842
Stresses in Soils due to Vertical Load on Piles, Verendra Singh, NMG:June 76:I-451

Soil Samplers

In Situ Soils Measuring Devices — Part II, CE:Dec 75:73
Pneumatic Sinusoidal Loading System, Clarence K. Chan and John Paul Mulilis, TN: GT3:Mar 76:277: 11953

Soil Stability

Dynamic Analysis of the Slide in the Lower San Fernando Dam during the Earthquake of February 9, 1971, H. Bolton Seed, Izzat M. Idriss, Kenneth L. Lee and Faiz I. Makdisi, GT9:Sept 75:889:11541
New Design Procedure for Stability of Soft Clays, Charles C. Ladd and Roger Foott, GT7:July 74: 763:10664
Reinforced Earth Bridges Highway Sinkhole, Ronald S. Steiner and Edward J. Trojan, CE:July 75:54

Soil Stabilization

Earth Retention by Drilled Reinforced Concrete Caissons, Arthur H. Anderson, Jr., CE:Oct 76:54
Effect of Catalyst in Soil-Resin Stabilization, Dalim K. Majumdar, GT6:June 75:531:11385
Electro-Osmosis Applied to Unstable Embankment, Brian A. Chappell and Peter L. Burton, GT8:Aug 75:733:11495
Finite Element Analysis of Cement Fill Exposures, John L. Meek and R. W. Kirkby, NMG:June 76:II-901
Future Advances in Soil Placement and Improvement, J. Richard Bell, Preprint No.2775, Sept 76, 19pp.
Need for Estimated Cement Requirements for Stabilizing Lateritic Soils, Samuel A. Ola, TE2:May 74:379:10534
New and Conventional Engineering Uses of Fly Ash, Ramesh C. Joshi, Donald M. Duncan and Howard M. McMaster, TE4:Nov 75:791:11730
Planning and Performing Compaction Grouting, James Warner and Douglas R. Brown, GT6:June 74:653:10606
Reinforced Earth Bridges Highway Sinkhole, Ronald S. Steiner and Edward J. Trojan, CE:July 75:54
Review of Expansive Soils, Gerald J. Gromko, GT6: June 74:667:10609

Soil Strength

Soil Strength Improvement Through Reinforcement, Kenneth L. Lee, Preprint No.2806, Sept 76, 28pp.
Strength of One Dimensionally Consolidated Clays, Adel S. Saada and Gary F. Bianchini, GT11:Nov 75:1151:11707

Soil Structure

Nonlinear Analysis of Earth Structures, W. D. Liam Finn and Ronald Ian S. Miller, NMG:June 76:I-194

Soil-Structure Interaction

A Comparative Study of Structural Response to Explosion-Induced Ground Motions, Neal FitzSimons, Chmn., SREGM:75, 138pp.
Consideration of Finite Element Representation, H. Bolton Seed, STN75:Dec 75:II-246
Consideration of Other Techniques, Robert V. Whitman, STN75:Dec 75:II-257
Design Concepts for Structural Steel Dolphins, Casimir J. Kray, ST76:Aug 76:661
Design of Large Papermachine Mat Foundation, Anton W. Wegmuller, James H. Woodward and John R. Bayliss, ST1:Jan 76:231:11863
Determination of the Missile Load for Steel Columns of a Nuclear Power Plant Structure, Zin-Tsai Shi, STN75:Dec 75:II-29
Dynamic Analysis of Footings on Layered Media, Eduardo Kausel, Jose M. Roesset and Gunter Waas, EM5:Oct 75:679:11652
Dynamic Response of Embedded Machine Foundations, Kenneth H. Stokoe, II and Frank E. Richart, Jr., GT4:Apr 74:427:10499
Dynamic Soil Structure Interaction, Jose M. Roesset, NMG:June 76:I-3
Dynamic Stiffness Matrices for Viscoelastic Half-Plane Foundations, Anil K. Chopra, P. Chakrabarti and Gautam Dasgupta, EM3:June 76:497:12209
Dynamic Stiffness of Circular Foundations, Eduardo Kausel and Jose M. Roesset, EM6:Dec 75:771: 11800
Earthquake Finite Element Analysis of Structure-Foundation Systems, Ashok K. Vaish and Anil K. Chopra, EM6:Dec 74:1101:10990
Effect of Uplift on Soil-Structure Interaction and Toe Pressure Calculation, Dale R. Bervig and Chang Chen, STN75:Dec 75:II-351
Effects of Foundation Tipping on Dynamic Response, Jethro W. Meek, ST7:July 75:1297:11411
Efficient Finite Element Analysis of Seismic Structure-Soil-Structure Interaction, John Lysmer, H. Bolton Seed, T. Udaka, Richard N. Hwang and C.-F. Tsai, STN75:Dec 75:II-125
Embankment Loading of Hydraulic Fill, Timothy K. Dahlstrand, Preprint No.2649, Apr 76, 14pp.

Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities, E. D'Appolonia, H. Bolton Seed, Robert V. Whitman, Shih-Lung Chu, Carl J. Costantino, Asadour H. Hadjian, Izzat M. Idriss, John Lysmer, R. Scavuzzo and Milomir Stoykovich, SDNPF:Dec 73:III-19
Forced Vibrations of Strip Footings on Layered Soils, George C. Gazetas and Jose M. Roesset, ST76:Aug 76:115
Frame Interaction in Nonorthogonal Grids, Stephen Chriss, ST4:Apr 76:739:12031
General Panel — Summary of Presentations, John D. Stevenson, E. J. Keith, Nathan M. Newmark, R. E. Keever, Jack E. Cermak, H. Bolton Seed and M. J. Holley, SDNPF:Dec 73:III-81
Influence of Canyon on Soil-Structure Interaction, Hung L. Wong, Mihailo D. Trifunac and Kevin K. Lo, EM4:Aug 76:671:12328
Interaction of Soil and Power Plants in Earthquakes, Jeremy Isenberg and Samy A. Adham, PO2:Oct 72: 273:9242
Large Flexible Turbine Foundations, Amin M. Almuti, T76:Aug 76:707
Liner-Medium Interaction in Tunnels, Bijan Mohraz, Alfred J. Hendron, Jr., Randall E. Ranken and Mohammad H. Salem, CO1:Mar 75:127:11174
Matrix Analysis of Structure-Foundation Interaction, Fukashi Miyahara and John G. Ergatoudis, ST1:Jan 76:251:11836
Modal Analysis for Building-Soil Interaction, Jacobo Bielak, EM5:Oct 76:771:12451
New Licensing Philosophy Concerning Soil Structure Interaction, Kanwar K. Kapur, STN75:Dec 75:II-238
Nonlinear Behavior in Soil-Structure Interaction, Eduardo Kausel, Jose M. Roesset and John T. Christian, GT11:Nov 76:1159:12579
A Numerical Method of Analysis of Foundation Plates, Alexander M. Gorlov, NMG:June 76:III-1371
Optimal Aseismic Design of Building and Equipment, Shih-Chi Liu, M. R. Dougherty and F. Neghabat, EM3:June 76:395:12208
Progress Report of ASCE Ad Hoc Committee on Soil Structure Interaction, Izzat M. Idriss, STN75: Dec 75:II-236
Seismic Interaction of Structures on Hysteretic Foundations, Anestis S. Veletsos and V. V. Damodaran Nair, ST1:Jan 75:109:11046
Seismic SSI of Nuclear Power Plant Structures, Izzat M. Idriss and Khosrow Sadigh, GT7:July 76:663: 12246
Session 6: Soil Structure Interaction — Dynamic Soil Pressure, John Lysmer, STN75:Dec 75:II-171
Session 6: Soil Structure Interaction — Seismic Waves, Juan Enrique Luco, STN75:Dec 75:II-172
Session 6: Soil Structure Interaction — Design Time-History, P. K. Agrawal, STN75:Dec 75:II-181
Session 6: Soil Structure Interaction — Design and Analysis, Asadour H. Hadjian, STN75:Dec 75:II-191
Session 6: Soil Structure Interaction — Wave Propagation, Carl J. Costantino, STN75:Dec 75:II-203
Session 6: Soil Structure Interaction — Finite Element, Lumped Parameter, John R. Hall, Jr., STN75:Dec 75:II-206
Session 6: Soil Structure Interaction — Nonlinear Effects, Eduardo Kausel, STN75:Dec 75:II-223
Short Duration Analytic Earthquake, Gordon R. Johnson and Howard I. Epstein, ST5:May 76:993: 12109
Soil Island Approach to Structure/Media Interaction, Ivan Nelson and Jeremy Isenberg, NMG:June 76:I-41
Soil-Structure Interaction Analyses for Seismic Response, H. Bolton Seed, John Lysmer and Richard N. Hwang, GT5:May 75:439:11318
Soil-Structure Interaction of Concrete Pipe Systems, Raymond J. Krizek, Ross B. Corotis and Thomas H. Wenzel, ST76:Aug 76:607
Some Effects of Dynamic Soil Properties on Soil-Structure Interaction, Frank E. Richart, Jr., GT12: Dec 75:1193:11764
Stress Distribution for Heavy Embedded Structures, Kul Bhushan and Steven C. Haley, TN: GT7:July 76:807:12227
Stresses on Shallow Circular Pipe by Transformed Section, Rowland Richards, Jr. and Jagdish S. Agrawal, GT6:June 74:637:10631
Structural Design of Nuclear Plant Facilities, John D. Stevenson, Chmn., SDNPF:Dec 73
Synthesis of Finite Element Analysis of Culverts, John F. Abel and James Neil Kay, NMG:June 76: II-873
Uncertainties in Soil Structure Interaction, John T. Christian, STN75:Dec 75:II-105

Soil Subsidence

Anchorage Port Survives Nature, Harry Ekizian, CE: Dec 76:64

Soil Tests

Analysis of Swelling-Soil Column Infiltration Test, Jacob Uzan, TN: GT9:Sept 76:1014:12367
In Situ Measurement of Soil Properties, Harvey E. Wahls, Chmn., GT75:June 75
Pneumatic Sinusoidal Loading System, Clarence K. Chan and John Paul Mulilis, TN: GT3:Mar 76:277: 11953
Seismic Evaluation of Embankments, Richard W. Kramer, NMG:June 76:III-1445
Uniform Placement of Sand, Wayne A. Bieganousky and William F. Marcuson, III, GT3:Mar 76:229: 11985
Unsaturated Flow During Soil Treatment of Septic Tank Effluent, Johannes Bouma, EE6:Dec 75:967: 11783
Vibratory In Situ and Laboratory Soil Moduli Compared, Robert W. Cunny and Zelma B. Fry, SM12:Dec 73:1055:10219
Vibroflotation Compaction of Granular Hydraulic Fills, Ralph E. Brown, Preprint No.2657, Apr 76, 30pp.
Yielding of Sand in Plane Strain, Sam Frydman, GT5:May 74:491:10540

Soil Treatment

Treatment of Soft Foundations — A Review of Current Practice, Ara Arman, Preprint No.2797, Sept 76, 36pp.
Unsaturated Flow During Soil Treatment of Septic Tank Effluent, Johannes Bouma, EE6:Dec 75:967: 11783

Soil Types

Vane Shear Strengths at Two High Rotation Rates, Alexander D. Smith and Adrian F. Richards, OE75:June 75:421

Soil Water Movement

Inverted Filter Stabilizes Soil, Stops Erosion, Chesley J. Posey, CE:Apr 76:78

Solar Energy

Concrete in Water Resource and Energy Development, Harold G. Arthur, Preprint No.2741, Sept 76, 30pp.
Converting Solar Energy to Hydrogen: Answer to U.S.'s Long-Range Energy Needs?, Dean Garyet, CE:Jan 76:63
Energy Conservation in Housing Construction, John A. Lepore, Noam Lior and Sidney Shore, Preprint No.2781, Sept 76, 30pp.
New Sources of Power—Solar Energy, Peter E. Glaser, EI4:Oct 75:461:11661

Solar Heating

Highly Energy Efficient — Wilton Wastewater Treatment Plant, Douglas A. Wilke and David R. Fuller, CE:May 76:70

Solar Power Generation
Converting Solar Energy to Hydrogen: Answer to U.S.'s Long-Range Energy Needs?, Dean Garyet, CE:Jan 76:63
New Sources of Power—Solar Energy, Peter E. Glaser, EI4:Oct 75:461:11661

Solar Radiation
New Sources of Power—Solar Energy, Peter E. Glaser, EI4:Oct 75:461:11661
Thermal Calculations for Bridge Design, Bruce W. Hunt and Nigel Cooke, ST9:Sept 75:1763:11545
Wind Control of Algae Growth in Eutrophic Lakes, Heinz Stefan, Timothy Skoglund and Robert O. Megard, EE6:Dec 76:1201:12619

Solid Waste Collection
Decision Criteria in Solid Waste Collection, Ely Anthony Rosales Ouano and Richard J. Frankel, EE3:June 76:645:12173
Solid Waste Generation Rates of a University Community, Yishu Chiu, Joan Eyster and George W. Gipe, TN: EE6:Dec 76:1285:12638
A Study to Predict the Release of Metals from Hydraulically Dredged Material, William R. Gee, Robert W. George, John P. Hewitt and Kenneth B. Kim, WW76:Aug 76:492

Solid Waste Disposal
Solid Waste Generation Rates of a University Community, Yishu Chiu, Joan Eyster and George W. Gipe, TN: EE6:Dec 76:1285:12638
Solid Waste Management at Energy Complexes, David R. Berg, EFEEC:Aug 75:201

Solid Wastes
Construction Solid Waste, David A. Spivey, CO4: Dec 74:501:10993
Decision Criteria in Solid Waste Collection, Ely Anthony Rosales Ouano and Richard J. Frankel, EE3:June 76:645:12173
Energy Recovery from Refuse—State-of-the- Art, John Payne, EE2:Apr 76:281:12027
Environmental Systems at Walt Disney World, Arthur C. Bravo, EE6:Dec 75:887:11755
Evaluation of Environmental Impact of Landfills, Patrick Caffrey, Martin David and Robert K. Ham, EE1:Feb 75:55:11119
Future of Sanitary Landfill, Bruce Thompson and Iraj Zandi, EE1:Feb 75:41:11113
Hydraulic Collection and Disposal of Refuse, Jochen Kuhner and Peter M. Meier, EE4:Aug 76:769: 12296
Landfill Disposal of Liquid Sewage Sludge, Ralph Stone, EE1:Feb 75:91:11112
Minimum Cost in Residential Refuse Vehicle Routes, Jon C. Liebman, James W. Male and Magne Wathne, EE3:June 75:399:11368
Practical Refuse Recycling, C. Edward Walter, EE1: Feb 76:139:11941
Recycling Refuse Into Energy, Kneeland A. Godfrey, Jr., CE:Sept 76:86
Sanitary Landfill Leachates and Their Leachate Treatment, Edward S.K. Chian and Poppe B. DeWalle, EE2:Apr 76:411:12033
Sanitary Landfill Settlement Rates, Bing C. Yen, GT5:May 75:475:11335
Solid Waste Generation Rates of a University Community, Yishu Chiu, Joan Eyster and George W. Gipe, TN: EE6:Dec 76:1285:12638
Solid Waste Management at Energy Complexes, David R. Berg, EFEEC:Aug 75:201
Solid Waste Management: Equity Trade-Off Models, Louis A. Fuertes, James F. Hudson and David H. Marks, UP2:Nov 74:155:10913
Synthetic Aggregate From Incinerator Residues, Horace R. Blank, EM1:Feb 76:31:11898
Systems Analysis and Solid Waste Planning, Robert M. Clark and James I. Gillean, EE1:Feb 74:7:10316
Waste Generation Models for Solid Waste Collection, Donald Grossman, James F. Hudson and David H. Marks, EE6:Dec 74:1219:11022

Solubility
Failures in Limestones in Humid Subtropics, George F. Sowers, GT8:Aug 75:771:11521

Sonar
Remote Classification of Marine Sediments, Arthur S. Westneat, DIEE:Jan 76:289
Side Scan Sonar Views of Channel Disturbances Associated with Marine Traffic and Dredging, Larry S. Slotta, DIEE:Jan 76:226

Sonar Transducers
Acoustic Radiation of Submerged Vibrating Structures, Robert R. Smith and John T. Hunt, Preprint No.2711, Apr 76, 16pp.

Sorption
Virus-Coal Sorption Interaction, Pushpavadan P. Oza and Malay Chaudhuri, EE6:Dec 76:1255:12633

Sound
Concrete Walls for Highway Noise Reduction, Edwin C. Lokken, TE4:Nov 76:637:12534

South Carolina
The Colonial Port of Charleston, Thurman T. Morgan, Preprint No.2774, Sept 76, 26pp.
Distributing Public Housing Resources, Bruce Yandle and George Biediger, UP2:Nov 75:147:11689
Measuring Watershed Land-Use Changes with Airphotos, Donald B. Stafford, James T. Ligon and M. Eugene Nettles, TE1:Feb 76:117:11925
Sediment Transport in a South Carolina Mountain Stream, Benjamin C. Dysart, III and Charles H. Langdon, III, IR76:July 76:56

South Dakota
Landslide Hazard Mapping on a Shoestring, Clarence B. Drennon and William G. Schleining, SU1:Oct 75:107:11655

Space Capsules
The Space Program's Contribution to Our Bicentennial, George Edwin Shofner, Jr., Preprint No.2772, Sept 76, 24pp.

Spacecraft
The Computer in Shell Stability Analysis, Bo O. Almroth and James H. Starnes, EM6:Dec 75:873: 11811

Space Exploration
The Space Program's Contribution to Our Bicentennial, George Edwin Shofner, Jr., Preprint No.2772, Sept 76, 24pp.

Space Frames
AISC Code Compliance Provisions of ICES STRUDL-II, Michael G. Samuchin, ST76:Aug 76: 756
Preassembled Steel Space Frame Bridge, Michael M. Sprinkel and David Morris, TN: CO3:Sept 76:561: 12371

Space Perception
A Structural Design Process, James M. Becker, ST76: Aug 76:341

Spalling
Salt Damaged Bridge Decks: Cathodic Helps, Virginia Fairweather, CE:Sept 75:88

Spatial Distribution
Spatial Data Analysis of Nonstructural Measures, R. P. Webb and M. W. Burnham, WW76:Aug 76:329
Spatially Varied Flow in Channel Transitions, David T.Y. Kao and S. Dean Perry, WW76:Aug 76:1551

Specifications
AISC Code Compliance Provisions of ICES STRUDL-II, Michael G. Samuchin, ST76:Aug 76: 756
Aluminum Beam Webs Under Concentrated Loads, Maurice L. Sharp, ST76:Aug 76:569

Can a Computer Reduce Your Spec Writing Costs?, Carter H. Harrison, Jr., CE:Apr 76:80
Commentary on Orthotropic-Deck Bridge Specifications, Charles G. Schilling, Chmn., ST1:Jan 74:109:10273
Computer Input/Output Methods Useful for Engineers, Phoebe A. Miller and Barry A. Scott, ST76:Aug 76:851
Containment Vessel Design —ASME Section III Division 1 Versus Division 2, Norman W. Edwards, STN75:Dec 75:II-361
Design of Columns Subject to Biaxial Bending, John Springfield, Preprint No.2750, Sept 76, 21pp.
Elements of Steel Structures — History, State-of-the-Art, and Potential Developments: Columns, Reidar Bjorhovde, Preprint No.2786, Sept 76, 24pp.
Fatigue Provisions of AASHTO Specifications, Kadir M. Kusmez and Chi C. Tung, ST9:Sept 76:1725:12385
Formal Representation of Design Requirements, Steven J. Fenves, ST76:Aug 76:739
High Strength Bolts Subject to Tension and Prying, R. Shankaran Nair, Peter C. Birkemoe and William H. Munse, ST2:Feb 74:351:10373
History of Steel Beam Design, Theodore V. Galambos, Preprint No.2776, Sept 76, 21pp.
Limit Design of Folded Plate Structures, Morris N. Fialkow, ST76:Aug 76:222
Load Factor Analysis of Design of Bridges, James C. Porter, ST5:May 76:891:12098
Logical Complexity in Engineering Specifications, Jimmy L. Noland, ST76:Aug 76:761
Materials and Specification for Marine Structures, D. L. Frisby, OE75:June 75:818
Organizational Model for Design Specifications, Douglas J. Nyman and Steven J. Fenves, ST4:Apr 75:697:11227
Past and Future of Contract Administration, Woodrow W. Wilson, CO3:Sept 75:559:11560
Role of Contract and Specifications in Foundations Construction, Max E. Greenberg, CO2:June 74:113:10607
The Safety of Structural Steel Columns, Reidar Bjorhovde, Preprint No.2809, Sept 76, 27pp.
Software: Internal Maintenance Documentation, David M. Jubenville, Elizabeth Heinze and Robert L. Schiffman, ST76:Aug 76:903
Specifications—Design Professionals' Forgotten Challenge, Edward R. Fisk, CO2:June 76:303:12171
Specifications for Internal Programming Logic, Paul D. Barclay, ST76:Aug 76:869
Specifications for Successful Programming Projects, James L. Tocher, ST76:Aug 76:837
State-of-the-Art Report on Ultimate Strength of I-Beam Bridge Systems, Conrad P. Heins, Chmn., ST5:May 75:1085:11323
Test Method for Seismic Qualification of Equipment, Michael de Estrada, PO1:July 74:97:10656
Towards Optimum Design Through Building Codes, Emilio Rosenblueth, ST3:Mar 76:591:11999
Unstiffened Compression Elements, V. Kalyanaraman, Teoman B. Pekoz and George Winter, Preprint No.2807, Sept 76, 38pp.
User Documentation for Engineering Software, James P. Cassidy, Norman R. Greve and Douglas F. Burnside, ST76:Aug 76:884
9000 psi Concrete — Why? Why not?, William Schmidt and Edward S. Hoffman, CE:May 75:52

Spectra

Seismic Design Spectra for Nuclear Power Plants, Nathan M. Newmark, John A. Blume and Kanwar K. Kapur, PO2:Nov 73:287:10142

Spectral Analysis

Criteria Development to Evaluate Runway Roughness, Benjamin Frank McCullough and David Charles Steitle, TE2:May 75:345:11333
Effect of Structures on Irregular Waves Compared to Regular Waves, Yvon Ouellet and Yvon Morin, WW3:Aug 75:231:11494
Equalization of Time Variable Waste Loads, Vladimir Novotny and Robert M. Stein, EE3:June 76:613:12191
Evolutionary Spectra of Seismogram by Multifilter, Hiroyuki Kameda, EM6:Dec 75:787:11805
Method for Random Vibration of Hysteretic Systems, Yi-Kwei Wen, EM2:Apr 76:249:12073

Spectroscopy

Lead Analysis in Dredge Spoil Elutriates, Walter G. Cox, DIEE:Jan 76:242

Spectrum Analysis

Prediction of Wind Wave Heights, Henry T. Falvey, WW1:Feb 74:1:10324
Statistics of Random Wave Field, Keikhosrow Pajouhi and Chi C. Tung, WW4:Nov 75:435:11734

Speed

Tornado-Borne Missile Speeds, James F. Costello, Emil Simiu and Martin R. Cordes, Preprint No.2739, Sept 76, 29pp.

Speed Changes

Transition Curves for Speed Changes, Jacob Greenstein, TE4:Nov 76:699:12525

Spillway Capacity

Spillway Modification to Reduce Gas Supersaturation, Peter M. Smith, WW76:Aug 76:667

Spillway Design Flood

Prediction of Flow Development on Spillways, Robert J. Keller and Ashok K. Rastogi, HY9:Sept 75:1171:11581
Spillway Design for Series of Reservoirs, Catalino B. Cecilio, Brook A. Kraeger and Vefa Yucel, HY10:Oct 74:1329:10851

Spillways

Cavitation from Surface Irregularities in High Velocity, James W. Ball, HY9:Sept 76:1283:12435
Dams in Relation to Balanced Public Safety, Bob Buehler, EFRLD:Sept 75:27
Developing Region in Self-Aerated Flows, Robert J. Keller, K. K. Lai and Ian R. Wood, HY4:Apr 74:553:10501
Discharge Computations at River Control Structures, Dannie L. Collins, HY7:July 76:845:12237
Discharge over Polygonal Weirs, Horst Indlekofer and Gerhard Rouve, HY3:Mar 75:385:11178
Experimental Investigation of Flow Over Side Weirs, Ahmed El-Khashab and Kenneth V.H. Smith, HY9:Sept 76:1255:12402
A History of Bureau of Reclamation Construction-Part I, Harold G. Arthur, CO1:Mar 75:51:11189
Individual Statement During Summarization Session, Bob Buehler, EFRLD:Sept 75:199
Low-Head Air Regulated Siphons, Christopher R. Head, HY3:Mar 75:329:11155
Monetary Values of Life and Health, Bob Buehler, HY1:Jan 75:29:11047
Prediction of Flow Development on Spillways, Robert J. Keller and Ashok K. Rastogi, HY9:Sept 75;1171:11581
Spillway Design for Series of Reservoirs, Catalino B. Cecilio, Brook A. Kraeger and Vefa Yucel, HY10:Oct 74:1329:10851
Spillway Modification to Reduce Gas Supersaturation, Peter M. Smith, WW76:Aug 76:667

Spiral Cases

Stresses in Concrete Around Spiral Case, Prem S. Nigam, Om P. Jain and Madhu B. Kanchi, PO1:Jan 76:95:11845

Spoil

Deposition and Erosion in the Dredge Spoil and Other New York Bight Dumping Areas, George L. Freeland and George F. Merrill, DIEE:Jan 76:936
Dredged Material: Natural Resource or National Nuisance, Jaap de Nekker and Kees d'Angremond, DIEE:Jan 76:866
Dredge-Fill in the Coral Reef Tract of the Northern Florida Keys, George M. Griffin, DIEE:Jan 76:768

Effects of Suspended Dredged Material on the Commercial Crab, *Cancer Magister*, Richard Peddicord and Victor McFarland, DIEE:Jan 76:633
Elutriation of Dredge Material in New Orleans Harbor, Charles Grimwood and Terence J. McGhee, WW76:Aug 76:476
Engineering Challenges of Dredged Material Disposal, Robert M. Meccia, William C. Allanach and Fletcher H. Griffis, WW1:Feb 75:1:11096
Experience in Using Dredge Material for Construction Purposes, Joseph H. Lamar and James E. Laier, DIEE:Jan 76:882
Habitat Development on Dredged Material, Hanley K. Smith, DIEE:Jan 76:856
New Method Dewaters Dredged Material, Cuts Lagooning Space, CE:Apr 75:90
Spartina Revegetation on Dredge Spoil in SE Marshes, William M. Dunstan, Gregory L. McIntire and Herbert L. Windom, WW3:Aug 75: 269:11530
Physicochemical Properties of Dredge Spoil, Alena Mudroch and Ales J. Zeman, WW2:May 75:201: 11317
Predicting and Controlling Turbidity Around Dredging and Disposal Operations, William D. Barnard, DIEE:Jan 76:930
Sediment-Water Interaction during Dredging Operations, John F. Sustar, Thomas H. Wakeman and Richard M. Ecker, DIEE:Jan 76:736
Silt Curtains for Dredging Turbidity Control, Edward E. Johanson, DIEE:Jan 76:990
A Study of the Effects of Maintenance Dredging on Selected Ecological Parameters in the Gulfport Ship Channel, Gulfport, Mississippi, Joseph W. Markey and Hugh D. Putnam, DIEE:Jan 76:821
A Study to Predict the Release of Metals from Hydraulically Dredged Material, William R. Gee, Robert W. George, John P. Hewitt and Kenneth B. Kim, WW76:Aug 76:492
Trace Metals in Open Water Disposal of Dredged Material, Kenneth Y. Chen, James C.S. Lu and Amancio Z. Sycip, WW4:Nov 76:443:12546
Transplanting Maritime Plants to Dredged Material in Mississippi Waters, Lionel H. Eleuterius and Hugh A. McClellan, DIEE:Jan 76:900

Spoil Banks

Analysis of Oxygen Demand of Sediments, J. Clement Burdick, III, DIEE:Jan 76:319
Bioassessment of the Standard Elutriate Test, Peter J. Shuba, Joe H. Carroll and Henry E. Tatem, DIEE: Jan 76:645
Challenges in Disposal of Dredged Material, B. C. Godwin, Preprint No.2648, Apr 76, 13pp.
Chemical Reactions During Disposal Operations, Thomas H. Wakeman and Calvin C. Fong, Preprint No.2712, Apr 76, 18pp.
Deposition and Erosion in the Dredge Spoil and Other New York Bight Dumping Areas, George L. Freeland and George F. Merrill, DIEE:Jan 76:936
Distribution of Toxic Heavy Metals in Marine and Freshwater Sediments, J. M. Brannon, R. M. Engler, J. R. Rose, P. G. Hunt and I. Smith, DIEE: Jan 76:455
Dredged Material as a Natural Resource, Michael R. Walsh, Preprint No.2714, Apr 76, 19pp.
Dredged Material Confinement Facilities as Solid-Liquid Separation Systems, Raymond J. Krizek, Joseph A. FitzPatrick and Dimitrios K. Atmatzidis, DIEE:Jan 76:609
Dredged Material Disposal: Social Costs and Other Externalities, R. M. Pope, DIEE:Jan 76:398
Dredged Material: Natural Resource or National Nuisance, Jaap de Nekker and Kees d'Angremond, DIEE:Jan 76:866
Embankment Loading of Hydraulic Fill, Timothy K. Dahlstrand, Preprint No.2649, Apr 76, 14pp.
Environmental Costs — Impact on Dredging, Carl C. Cable and William R. Pearson, DIEE:Jan 76:353
Evaluation of the Factors Influencing the Results of the Elutriate Test for Dredged Material Disposal Criteria, G. Fred Lee, Jose M. Lopez and M. D. Piwoni, DIEE:Jan 76:253
Experience in Using Dredge Material for Construction Purposes, Joseph H. Lamar and James E. Laier, DIEE:Jan 76:882
First Steps Toward Achieving Disposal Area Reuse, Raymond L. Montgomery and Michael R. Palermo, DIEE:Jan 76:529
Habitat Development on Dredged Material, Hanley K. Smith, DIEE:Jan 76:856
Hydraulic Dredge Spoil for Land Reclamation, Carl W. Garbe and Kuei-wu Tsai, Preprint No.2678, Apr 76, 24pp.
Impact of Dredge and Fill on Coastal Economic Development, Andrew A. Dzurik, DIEE:Jan 76:378
Impact of Dredging on River System Morphology, Peter F. Lagasse and Daryl B. Simons, WW76:Aug 76:434
Investigation of the Elutriate Test, Thomas P. O'Connor, DIEE:Jan 76:299
Lead Analysis in Dredge Spoil Elutriates, Walter G. Cox, DIEE:Jan 76:242
Maintenance Dredging and Four Polychaete Worms, James E. McCauley, Danil R. Hancock and Robert A. Parr, DIEE:Jan 76:673
Maintenance Dredging on the Arkansas River, Tasso Schmidgall, WW76:Aug 76:459
Mobility of Trace Metals during Open Water Disposal of Dredged Material and Following Resedimentation, Kenneth Y. Chen, James C.S. Lu and Amancio Z. Sycip, DIEE:Jan 76:435
Predicting and Controlling Turbidity Around Dredging and Disposal Operations, William D. Barnard, DIEE:Jan 76:930
Quarantine Island Disposal Plan, George Marsch, DIEE:Jan 76:579
Remote Classification of Marine Sediments, Arthur S. Westneat, DIEE:Jan 76:289
Response of Carolina Beach Inlet to a Deposition Basin Dredged in the Throat, Adrian J. Combe, III and George M. Watts, DIEE:Jan 76:719
Return of Fines from Commercial Dredging to the Ohio River, James C. North and John Clark, DIEE:Jan 76:593
Sediment-Water Interaction during Dredging Operations, John F. Sustar, Thomas H. Wakeman and Richard M. Ecker, DIEE:Jan 76:736
Silt Curtains for Dredging Turbidity Control, Edward E. Johanson, DIEE:Jan 76:990
Soil-Plant Relationships in Dredged Material Marshes with Particular Reference to Heavy Metal and Nutrient Availability, J. S. Boyce, DIEE:Jan 76:496
A Study of the Effects of Maintenance Dredging on Selected Ecological Parameters in the Gulfport Ship Channel, Gulfport, Mississippi, Joseph W. Markey and Hugh D. Putnam, DIEE:Jan 76:821
A Study to Predict the Release of Metals from Hydraulically Dredged Material, William R. Gee, Robert W. George, John P. Hewitt and Kenneth B. Kim, WW76:Aug 76:492
Thalweg Disposal of Riverine Dredged Material, Peter F. Lagasse, Daryl B. Simons and Yung H. Chen, DIEE:Jan 76:556
Transplanting Maritime Plants to Dredged Material in Mississippi Waters, Lionel H. Eleuterius and Hugh A. McClellan, DIEE:Jan 76:900

Spraying

Persistence of Virus on Sewage-Irrigated Vegetables, Edward P. Larkin, John T. Tierney and Robert Sullivan, EE1:Feb 76:29:11935

Spreading Basins

Use of Abandoned Gravel Pits as Spreading Grounds — Experience in Los Angeles County, Irving Sherman, IR76:July 76:461

Sprinkler Irrigation

Economic Pipe Sizing for Gravity Sprinkler Systems, Roland P. Perold, IR2:June 74:107:10583
Irrigation Return Flow Water Quality Analysis, Okay Cyril Igwe and T. L. Coulthard, IR76:July 76:519
Sprinkler Uniformity Effects on Quality of Return Flow, Ronald D. Bliesner and Lyman S. Willardson, IR76:July 76:508

Sprinkler Uniformity Measures and Skewness, Fazal H. Chaudhry, IR4:Dec 76:425:12620
Wind, Sprinkler Patterns, and System Design, Ido Seginer and Mordekhai Kostrinsky, IR4:Dec 75: 251:11752

Sprinklers
Micro-Climate Control of Deciduous Fruit Production with Overhead Sprinklers, Richard E. Griffin, IR76:July 76:278
Sprinkler Uniformity Effects on Quality of Return Flow, Ronald D. Bliesner and Lyman S. Willardson, IR76:July 76:508
Wind, Sprinkler Patterns, and System Design, Ido Seginer and Mordekhai Kostrinsky, IR4:Dec 75: 251:11752

Sprinkler Systems
Wind, Sprinkler Patterns, and System Design, Ido Seginer and Mordekhai Kostrinsky, IR4:Dec 75: 251:11752

Stability
Application of Stability Analyses to Slope Design, Umakant Dash, NMG:June 76:II-725
Breakwater Back Slope Stability, James R. Walker, Robert Q. Palmer and James W. Dunham, OE75: June 75:879
Buckling of Cooling-Tower Shells: Bifurcation Results, Peter P. Cole, John F. Abel and David P. Billington, ST6:June 75:1205:11365
Buckling of Cooling-Tower Shells: State-of-the-Art, Peter P. Cole, John F. Abel and David P. Billington, ST6:June 75:1185:11364
Buckling of Cylindrical Shells by Wind Pressure, Yung-shih Wang and David P. Billington, EM5:Oct 74:1005:10874
Buckling of Inelastic I-Beams under Moment Gradient, Sritawat Kitipornchai and Nicholas S. Trahair, ST5:May 75:991:11295
Centrifugal Modelling of Riverbank Failure, Sam Frydman and D. Huw Beasley, GT5:May 76:395: 12099
Column Design by P Delta Method, Brian R. Wood, Denis Beaulieu and Peter F. Adams, ST2:Feb 76: 411:11936
The Computer in Shell Stability Analysis, Bo O. Almroth and James H. Starnes, EM6:Dec 75:873: 11811
Concrete Structures for Subsea Oil Recovery — Design Considerations, Everald V. Wright and Marcel Gerbault, Preprint No.2675, Apr 76, 21pp.
Construction Redesign — Woodstock Rockslide, N.H., Brian K. Fowler, GT76:Aug 76:386
Continuum Method for Overall Stability of Tall Asymmetric Buildings, Ari Danay, Menachem Gellert and Jacob Gluck, ST12:Dec 75:2505:11761
Design Applications: The SSRC Guide, Third Edition, Bruce G. Johnston, Preprint No.2802, Sept 76, 33pp.
Design of Cooling Towers for Wind, David P. Billington and John F. Abel, ST76:Aug 76:242
Discrete Field Stability Analysis of Ribbed Plates, R. Richard Avent and Dieter Bounin, ST9:Sept 76: 1917:12413
Dynamic Buckling of Shallow Arches, David L.C. Lo and Ernest F. Masur, EM5:Oct 76:901:12493
Effects of Turbulence on Bridge Model Torsional Stability, Timothy A. Reinhold, Henry W. Tieleman and Francis J. Maher, ST5:May 76:1003:12118
Elastic Analysis of Rectangular Box Girders by Finite Element Method, Cetin Yilmaz and Ben T. Yen, ST76:Aug 76:1023
Elastic Stability of Polygon Folded Plate Columns, R. Richard Avent and James H. Robinson, Jr., ST5: May 76:1015:12108
Elements of Steel Structures — History, State-of-the-Art, and Potential Developments: Columns, Reidar Bjorhovde, Preprint No.2786, Sept 76, 24pp.
Experiments for Accuracy and Stability of Heat Conduction, Rao Yalamanchili, NMG:June 76:I-93
Foundation of the Sirikit Powerhouse, James D. Gill and Leib Wolofsky, GT76:Aug 76:82
Frame Collapse Using Tangent Stiffness, William Tranberg, Peter Swannell and John L. Meek, ST3: Mar 76:659:11979
Further Aspects of Design by PΔ Model, Brian R. Wood, Denis Beaulieu and Peter F. Adams, ST3: Mar 76:487:11973
High Rise Building Column Design, Jerome S.B. Iffland, Preprint No.2740, Sept 76, 28pp.
Inelastic Spatial Stability of Restrained Beam-Columns, Sriramulu Vinnakota and Pentti Aysto, ST11:Nov 74:2235:10919
Inelastic Stability of Beams under Biaxial Bending, Chesada Kasemset, Fumio Nishino and Seng-Lip Lee, EM5:Oct 74:965:10881
Instability in Tidal Flow Computational Schemes, T. John Weare, HY5:May 76:569:12100
Instability Mechanisms for Rotating Appendages, John O. Dow and Chuan C. Feng, Preprint No.2801, Sept 76, 27pp.
Iterative Schemes for Slope Stability Analysis, Antonio Soriano, NMG:June 76:II-713
Lateral Stability of Cable Truss, H. Max Irvine and Paul C. Jennings, EM4:Aug 75:403:11519
Lateral Stability of Plane Open-Web Structures, P. C. Varghese, ST11:Nov 74:2223:10924
Lumped Parameter Circular Plate Stability Analysis, George Johnson and Walter Pilkey, TN: ST5:May 76:1135:12128
Mild Slope Stable Channels — A Stochastic Design Approach, Bent A. Christensen, Preprint No.2680, Apr 76, 14pp.
Model of Interactive Buckling of Stiffened Plates, James G.A. Croll, EM5:Oct 75:575:11622
Morphology of Cobble Streams in Small Watersheds, Ruh-Ming Li, Daryl B. Simons and Michael A. Stevens, HY8:Aug 76:1101:12304
Nonlinear Analysis of Reticulated Space Trusses, Dharapuram S. Jagannathan, Howard I. Epstein and Paul P. Christiano, ST12:Dec 75:2641:11799
Overall Elastic Stability of Multistory Buildings, R. Shankaran Nair, ST12:Dec 75:2487:11762
Parametric Instabilities of Cable Hanging from Ship, William C. Kerr, OE75:June 75:569
Plasticity Solutions for Slopes, Wai F. Chen and Nimitchai Snitbhan, NMG:June 76:II-731
Post-Buckling of Redundant Rectangular Beams, Scott T. Woolcock and Nicholas S. Trahair, EM4: Aug 75:301:11491
Rainwater Ponding on Beam-Girder Roof Systems, R. Richard Avent and William G. Stewart, ST9: Sept 75:1913:11564
Safety Factors for Riprap Protection, Michael A. Stevens, Daryl B. Simons and Gary L. Lewis, HY5: May 76:637:12115
The Safety of Structural Steel Columns, Reidar Bjorhovde, Preprint No.2809, Sept 76, 27pp.
Seismic Evaluation of Embankments, Richard W. Kramer, NMG:June 76:III-1445
Shear Buckling of Square Perforated Plates, John F. Grosskurth, Jr., Richard N. White and Richard H. Gallagher, EM6:Dec 76:1025:12641
Some Aspects of Theory and Applications of Numerical Methods, Chandrakant S. Desai, NMG: June 76:I-58
Some Geotechnical Aspects of Marginal Wharf Design, William Enkeboll and Vernon A. Smoots, Preprint No.2699, Apr 76, 24pp.
Specimen Preparation and Cyclic Stability of Sands, Richard S. Ladd, Preprint No.2752, Sept 76, 28pp.
Stability and Dynamic Analyses of Cooling Tower, Chang-hua Yeh and William Y.J. Shieh, PO2:Nov 73:339:10141
Stability of Channel Beds by Armoring, William C. Little and Paul G. Meyer, HY11:Nov 76:1647: 12519
Stability of Generally Orthotropic Skew Plate, R. S. Srinivasan and S. V. Ramachandran, TN: EM3:June 76:569:12168
Stability of Half-Barrel Orthotropic Shells, Osman A. Marzouk and George Abdel-Sayed, ST7:July 75: 1517:11441
Stability of Hyperboloidal Shells, Daniel R. Veronda and Victor I. Weingarten, ST7:July 75:1585:11446

Stability of Offshore Pipe in Cohesive Sediment, Osman I. Ghazzaly, Leland M. Kraft, Jr. and S. J. Lim, OE75:June 75:490
Stability of Pressurized Hyperboloidal Shells, Daniel R. Veronda and Victor I. Weingarten, EM5:Oct 75: 663:11650
Stability of Shells Attached to An Elastic Core, Victor I. Weingarten and Yuan S. Wang, EM5:Oct 76:839:12492
Stability of Slopes by Logarithmic-Spiral Method, Yang H. Huang and Craig M. Avery, GT1:Jan 76: 41:11838
Stability of Structures with Intermediate Filters, Amrik S. Chawla, HY2:Feb 75:223:11139
Stability Problems for the Navigation Channel in a Tidal River, Egon Giese, WW76:Aug 76:280
A Stability Study of a Concrete Arch Dam Rock Abutment, Edward C.K. Tom, Nestor T. Mirafuente and Efren Estrella, GT76:Aug 76:264
Stochastic Analysis of Floor Loads, Ross B. Corotis and Viresh A. Doshi, ST76:Aug 76:72
Stress and Stability Analyses of Underground Openings Taking Post-Failure Behavior of Rock into Consideration, T. Kawamoto and T. Saito, NMG:June 76:II-791
Three-Dimensional FE Analysis of a Room and Pillar Coal Mine (A Comparison with Experiment), Robert T. Langland, NMG:June 76:II-802
Torsional Flutter of Rectangular Prisms, Yasuharu Nakamura and Taketo Mizota, EM2:Apr 75:125: 11226
Velocities Above Rough Bed in Oscillatory Flow, John F.A. Sleath, WW4:Nov 74:287:10930
Viscoplastic Constitutive Matrix Corresponding to the Hyperbolic Sine Creep Law, Guenter W. Borm, NMG:June 76:I-357
Wave Period Effect on the Stability of Riprap, John P. Ahrens and Bruce L. McCartney, OE75:June 75: 1019

Stability Analysis
Auburn-Foresthill Bridge Abutment Slope Stability, J. Lawrence Von Thun and Bruce M. Moyes, GT76: Aug 76:333
End Effects on Stability of Cohesive Slopes, Mohsen M. Baligh and Amr S. Azzouz, GT11:Nov 75:1105: 11705
Initial Stresses in Natural Slope Analysis, Robin N. Chowdhury, GT76:Aug 76:404
Libby Dam Left Abutment Rock Wedge Stability, James V. Hamel, GT76:Aug 76:361
Stability of Trenches Filled with Fluids, Kevin L. Nash, CO4:Dec 74:533:11006
3-D Stability Analysis of Tunnels in Jointed Rock, Walter Wittke and Bernd Pierau, NMG:June 76:III-1401

Stability Criteria
Instability Mechanisms for Rotating Appendages, John O. Dow and Chuan C. Feng, Preprint No.2801, Sept 76, 27pp.

Stability Methods
Beam Analog for Plate Elements, M. Ezzat Mohsin and Edward E. Sadek, ST1:Jan 76:125:11844

Stabilization
Effect of Catalyst in Soil-Resin Stabilization, Dalim K. Majumdar, GT6:June 75:531:11385
Finite Element Analysis of Pile-Supported Pavement Structures, Raman Pichumani, John E. Crawford and George E. Triandafilidis, TE2:May 74:293: 10516

Stadiums
Olympic Construction for Olympic Games, CE:June 76:56
The Superdome Foundation, Thor L. Anderson and Melvin C. Williams, CO1:Mar 76:81:11971
The University of Idaho Stadium: A Micro-Lam Application, Sherman A. Nelson, Preprint No.2800, Sept 76, 19pp.

Stage-Discharge Relations
Mississippi River Dikes and Stage-Discharge Relations, Jerome A. Westphal, Paul R. Munger and Clifford D. Muir, WW76:Aug 76:1383
Missouri River Stage-Discharge Shift, A. D. Berryman, Howard E. Christian and Everett V. Richardson, WW76:Aug 76:1350

Stainless Steel
Behavior of Cold-Rolled Stainless Steel Members, Shien T. Wang, Samuel J. Errera and George Winter, ST11:Nov 75:2337:11724

Stairways
Study of Three-Flight Free-Standing Staircases, Simon F. Ng and Alvar T. Chetty, ST7:July 75: 1419:11434

Standardization
Metrication — An Australian Non-Event, Carter H. Harrison, Jr., CE:Oct 76:51

Standards
ASCE Tackles Standards, CE:Aug 76:64
Computer Input/Output Methods Useful for Engineers, Phoebe A. Miller and Barry A. Scott, ST76:Aug 76:851
Containment Vessel Design —ASME Section III Division 1 Versus Division 2, Norman W. Edwards, STN75:Dec 75:II-361
Corps Guidelines for Dam Safety Inspection Need Revamping, Bob J. Buehler, CE:Jan 75:74
Development of United States Atomic Energy Commission Regulatory Standards, Robert Minogue, SDNPF:Dec 73:III-110
Engineers and Computers — Interaction or Reaction, Richard L. Bland, EI2:Apr 75:79:11253
Environmentally Sensitive Construction Procedures, Austin H. Emery, CE:Mar 75:87
Formal Representation of Design Requirements, Steven J. Fenves, ST76:Aug 76:739
Illustrations of Reliability-Based Design, Mayasandra K. Ravindra, Niels C. Lind and Wilfred W.C. Siu, ST9:Sept 74:1789:10779
Incorporating Highway Safety into Level of Service, Walter J. Diewald, TE2:May 74:417:10557
Liability of Public and Private Interests on Dams, Joseph A. McQuillan, EFRLD:Sept 75:177
Method of Developing Optimum Tolerances, Emilio Rosenblueth and Alejandro Asfura, ST2:Feb 76: 323:11889
Metrication—SI in America, Cornelius Wandmacher, EI1:Jan 75:25:11073
A Performance Standard for Foundations and Excavations, Felix Y. Yokel, CE:Oct 76:80
Preparation of Surveying Safety Manual for Missouri, Ward R. Malisch and Arthur W. Jacobs, SU1:Oct 75:129:11656
Proposed Standards: Land Disposal of Effluents, John V. Betz, CE:May 75:77
Recommended Standards for the Responsibility, Authority, and Behavior of the Inspector, Joseph Goldbloom, Chmn., CO2:June 75:359:11384
Research Activity and Needs in Engineering Surveying, Gunther Greulich, SU1:Oct 75:65:11610
A Review of Electronic Computing for Civil Engineering Within the Federal Government, David R. Schelling, Preprint No.2818, Sept 76, 29pp.
Seismic Design of Non-Structural Building Systems, Alfred Goldberg, Preprint No.2756, Sept 76, 14pp.
A Standard for Computer Program Distribution, John T. Christian, Chmn., GT10:Oct 76:1049:12472
Transportation, Land Use, and Air Quality Programs, Charles E. Dare, TE2:May 76:411:12124

State Government
The Agency, The Owner, and The Engineer, in Texas, Noble J. Campbell, EFRLD:Sept 75:99
A State Government View of Energy Complexes, James E. Harrington, EFEEC:Aug 75:59
State Government Views of Licensing Energy Complexes, Sheldon A. Schwartz, EFEEC:Aug 75: 345

State Laws
ASCE Local Level Public Service Actions Have Big Impact, Virginia Fairweather, CE:June 75:51
County Leads in Steering Growth, Gloria S. McGregor, CE:July 75:47
Illinois: First Steps in Bikeway Development, Jim Kashmier, BP75:Dec 75:75
Liability Considerations in State Dam Permit and Inspection Programs (A Look at Ohio's Program), Roy Winkle, EFRLD:Sept 75:113
National Environmental Policies and the Effect on Productivity Through Regulation, Norman E. Hill, PROD:Aug 76:277
Nebraska Flood-Plain Management Program—Part I, Albert E. Mathews, HY7:July 75:977:11437
One Owners Dam Safety Program and Its Application Under Government Regulations, Thomas A. Kelly, EFRLD:Sept 75:105
An Outline of the Enforcement of Safety of Dams Statutes in California, Porter A. Towner, EFRLD: Sept 75:87
Report of the Roundtable on Legislation, Marie E. Birnbaum, BP75:Dec 75:590
Review and Responsibility of State Dam Safety Programs, Bruce A. Tschantz, EFRLD:Sept 75:51
State Government Views of Licensing Energy Complexes, Sheldon A. Schwartz, EFEEC:Aug 75: 345
Uniformity among Weather Modification Laws, Ray Jay Davis, IR3:Sept 76:285:12379
US Water Cleanup Program Speeds Up—But Still Much Red Tape, Eugene E. Dallaire, CE:Aug 75:71

State Planning
Propensity of Statewide Multimodel Transportation, William D. Klink and Jason C. Yu, TE4:Nov 75: 639:11710

Static Loads
Statics of Suspended Cables, H. Max Irvine, EM3: June 75:187:11351
Three-Dimensional Analysis of Shear Wall Buildings to Lateral Load, Jayanta K. Biswas and Wai K. Tso, ST5:May 74:1019:10537
Wall-Beam Frames under Static Lateral Load, Allen L. Mee, Ian J. Jordaan and Michael A. Ward, ST2: Feb 75:377:11121

Static Pile Formula
Bearing Capacity and Settlement of Pile Foundations, George Geoffrey Meyerhof, GT3:Mar 76:195:11962

Statics
Nonlinear Analysis of Earth Structures, W. D. Liam Finn and Ronald Ian S. Miller, NMG:June 76:I-194

Static Stability
Stability of Cantilever Shells under Wind Loads, Prabhu S. Kundurpi, Gopalacharyulu Samavedam and David J. Johns, EM5:Oct 75:517:11612

Static Structural Analysis
Cantilever Cylindrical Shells Under Assumed Wind Pressures, S. Gopalacharyulu and David J. Johns, EM5:Oct 73:943:10085
Stability of Cantilever Shells under Wind Loads, Prabhu S. Kundurpi, Gopalacharyulu Samavedam and David J. Johns, EM5:Oct 75:517:11612

Stationary Processes
Approximation to First Passage Probability, Jann-Nan Yang, EM4:Aug 75:361:11502

Stations
Automated Ground Transportation System Stations with Multiple Loading Positions, Dietrich R. Bergmann, TE2:May 75:383:11328

Statistical Analysis
Acquiring Traffic Data by In-Motion Weighing, R. B. Machemehl, Clyde E. Lee and C. Michael Walton, TE4:Nov 75:681:11716
Ambient Response Analysis of Some Tall Structures, George T. Taoka, Michael Hogan, Fazlur R. Khan and Robert H. Scanlan, ST1:Jan 75:49:11051
Analysis of Bed Profiles in Sand Bed Canals, Khalid Mahmood and Hassan Ahmadi-Karvigh, WW76: Aug 76:564
Analytical Study of Freeway Reliability, Abishai Polus and Joseph L. Shofer, TE4:Nov 76:857:12570
Characterization and Models of the Watershed Storage Process, A. R. Rao, Pen-Chih Tao and C. Rukvichai, Preprint No.2663, Apr 76, 27pp.
Cost and Pricing Relationships in Water Supply, Robert M. Clark, EE2:Apr 76:361:12025
The Effect of Wave Breaking on the Statistical Distribution of Wave Heights, Ching Ton Kuo, ASCE:June 75:1211
Environmental Data Management, George K. Young and G. F. Tierney, WR2:Nov 76:255:12559
Extremal Statistics in Ocean Engineering, Leon E. Borgman, OE75:June 75:117
Extreme Wave Heights for Cleveland Harbor, D. T. Resio, OE75:June 75:62
Extreme Wind, Wave and Tide, Cheng Y. Yang, Mehmet Aziz Tayfun and M. H. Fallah, OE75:June 75:134
Floods Predicted From Rainfall Frequencies, Lee Robinson and Theodore T. Williams, HY10:Oct 72: 1773:9294
Highway and Sewer Impacts on Urban Development, Frank T. Rabe and James F. Hudson, UP2:Nov 75: 217:11728
Identifying Urban Flash Flooding Problems, William P. Darby and Mitchell J. Small, WR2:Nov 76:349: 12571
An Issue-Based Land-Use Planning Process, Stephen C. Lockwood, UP1:Aug 76:41:12341
Land Use and Water Quality in New York Rivers, Douglas A. Haith, EE1:Feb 76:1:11902
LOMARK: A Bidding Strategy, Richard Louis Wade and Robert B. Harris, CO1:Mar 76:197:11961
Maximum Response Statistics for Yielding Oscillator, Nilesh C. Chokshi and Loren D. Lutes, EM6:Dec 76:983:12632
Modeling Sewage Treatment Plant Input BOD Data, Paul M. Berthouex, William G. Hunter, Lars C. Pallesen and Chun-Yen Shih, EE1:Feb 75:127: 11132
Preliminary Dynamic Assessment of Deepwater Platforms, Paul H. Wirsching and Peter H. Prasthofer, ST7:July 76:1447:12264
Probabilistic Analysis and Design of a Retained Wall, Kaare Hoeg and Ramesh P. Murarka, GT3:Mar 74: 349:10436
Probabilistic Time Scheduling, Keith C. Crandall, CO3:Sept 76:415:12398
Rating and Reliability of Railway Bridges, William G. Byers, ST76:Aug 76:153
The Safety of Structural Steel Columns, Reidar Bjorhovde, Preprint No.2809, Sept 76, 27pp.
Seasonal and Nonseasonal ARMA Models in Hydrology, Pen-Chih Tao and Jacques W. Delleur, HY10:Oct 76:1541:12477
Sequential Deterministic Optimization in Reservoir Operation, Thomas E. Croley, II, HY3:Mar 74:443: 10426
Sprinkler Uniformity Measures and Skewness, Fazal H. Chaudhry, IR4:Dec 76:425:12620
Staging of Improvements to Air Transport Terminals, Angus J. McKenzie, Jack W.E. Huggett and Kenneth W. Ogden, TE4:Nov 74:855:10920
Statistical Aspects of Containment Tendon Surveillance, Mahendra P. Singh and Adolf Walser, PO1:July 75:23:11406
Statistical Design Basis for Submerged Diffuser, Thomas E. Pease and Michael J. Skelly, PO1:July 75:11:11408
Statistical Design of Equalization Basins, Dominic M. Di Toro, EE6:Dec 75:917:11782
Statistical Evaluation of Reaeration Prediction Equations, Linfield C. Brown, EE5:Oct 74:1051: 10849
Statistical Quality Control at Kastraki Earth Dam, Panaghiotis C. Kotziss and Aris C. Stamatopoulos, GT9:Sept 75:837:11552

Statistical Study of Phosphorus Removal in Wisconsin, Martin H. David, Frederick J. Schroeder, J. Jeffrey Peirce, Erhard F. Joeres and Daryl A. Braasch, EE2:Apr 76:433:12045
Statistical Variation of the Compliance of Coal, Richard Henry Atkinson and Hon-Yim Ko, NMG: June 76:1-367
Statistics of Liquefaction and SPT Results, John T. Christian and William F. Swiger, GT11:Nov 75: 1135:11701
Stochastic Analysis of Dune Bed Profiles, Baum K. Lee and Harvey E. Jobson, HY7:July 74:849:10657
Study on the Wind-Wave Characteristics in Model Harbor, G. S. Liu and Frederick L.W. Tang, OE75: June 75:706
Systematic Identification of DO-BOD Model Structure, Bruce Beck and Peter Young, EE5:Oct 76:909:12461
Thermal Stress as a Narrow-Band Random Load, Robert A. Heller, EM5:Oct 76:787:12450
Time-Dependent Spectral Content of System Response, Ross B. Corotis and Erik H. Vanmarcke, EM5:Oct 75:623:11648
Towards Optimum Design Through Building Codes, Emilio Rosenblueth, ST3:Mar 76:591:11999
Urban Travel Demand Models with Competitive Modes, Paul J. Ossenbruggen and Alex Li, TE3: Aug 76:585:12314
Vertical Seismic Response Spectra, Paul C. Rizzo, Donald E. Shaw and Matthew D. Snyder, PO1:Jan 76:121:11858
Waste Generation Models for Solid Waste Collection, Donald Grossman, James F. Hudson and David H. Marks, EE6:Dec 74:1219:11022
Water Quality Models Using the Box-Jenkins Method, Peter M. Huck and Grahame J. Farquhar, EE3:June 74:733:10629
Wet and Dry Periods of Annual Flow Series, Zekai Sen, HY10:Oct 76:1503:12457

Statistical Distributions

The Effect of Wave Breaking on the Statistical Distribution of Wave Heights, Ching Ton Kuo, ASCE:June 75:1211

Statistical Samples

Nearshore Wave Direction Gage, William R. James and Robert J. Hallermeier, WW4:Nov 76:379:12552

Statistics

Empirical Effective Width Formula, Niels C. Lind, Mayasandra K. Ravindra and Gerald Schorn, ST9: Sept 76:1741:12426

Stay Lines

Buckling of A Single-Crossarm Stayed Column, Raymond J. Smith, George T. McCaffrey and John S. Ellis, ST1:Jan 75:249:11071

Steady Flow

Solution for Steady Open Channel Flow, Fred D. Theurer, A. H. Barnes and Everett V. Richardson, WW76:Aug 76:793

Steady State

Seepage through Opening in Cutoff Wall Under Weir, Suresh P. Brahma, GT3:Mar 75:329:11204

Steel

The Bicentennial of Structural Engineering, Carl Hirsch, ST76:Aug 76:359
Building Named in National Steel Contest, CE:Jan 76:12
Empirical Effective Width Formula, Niels C. Lind, Mayasandra K. Ravindra and Gerald Schorn, ST9: Sept 76:1741:12426
Fatigue and Fracture of Bridge Steels, Richard Roberts and George R. Irwin, ST2:Feb 76:337: 11913
Heating Calculation of Structural Steel Members, Bernard Barthelemy, ST8:Aug 76:1549:12303
High Strength Bolts Subject to Tension and Prying, R. Shankaran Nair, Peter C. Birkemoe and William H. Munse, ST2:Feb 74:351:10373
Inelastic Cycles of Axially Loaded Steel Members, Lawrence F. Kahn and Robert D. Hanson, ST5: May 76:947:12111
Steel Orthotropic Plates under Alternate Loads, Giulio Ceradini, Carlo Gavarini and Mario P. Petrangeli, ST10:Oct 75:2015:11618
Strength of Beams with Eccentric Reinforced Holes, Tsong-Miin Wang, Robert R. Snell and Peter B. Cooper, ST9:Sept 75:1783:11540
Uses of Cold-Formed Steel in Construction on Rise, CE:Feb 76:18

Steel Beams

Dynamic Behavior of Box-Girder Jetties, Trevor J. Poskitt, WW2:May 75:181:11310
History of Steel Beam Design, Theodore V. Galambos, Preprint No.2776, Sept 76, 21pp.

Steel Constituents

Determination of the Missile Load for Steel Columns of a Nuclear Power Plant Structure, Zin-Tsai Shi, STN75:Dec 75:II-29

Steel Detailing

Integrated System for Production of Joists, A. Murray Lount and Sidney H. Simmonds, ST4:Apr 75:807:11242
Past 50-Year Development of Constructional Steels, Ralph D. Webb, John A. Gilligan and Roland M. Brown, CO4:Dec 75:785:11753

Steel Frames

Computer Analysis of Steel Frame in Fire, Wun-Chau Cheng and Cary K. Mak, ST4:Apr 75:854: 11262
Steel Frame, Precast Floors Meet Impossible Time Constraints, Arthur B. Andersen, CE:Feb 76:54

Steel Piles

The Corrosion of Coated Steel Piles in the Ocean, E. Escalante, W. P. Iverson and W. F. Gerhold, Preprint No.2733, Apr 76, 22pp.
Design Concepts for Structural Steel Dolphins, Casimir J. Kray, ST76:Aug 76:661
H-Bearing Piles in Limestone and Clay Shales, William D. Ashton and Paul H. Schwartz, GT7: July 74:787:10667
Innovative Design at Florida Bulkhead Reduces Material and Construction Costs, Anthony A. Nolan, CE:May 76:81
Interlock Tension in Steel Sheet Piling, J. Neil Kay, ST10:Oct 75:2093:11638

Steel Pipes

Circular Steel Tubes in Bending, Donald R. Sherman, Preprint No.2694, Apr 76, 27pp.
Test of Circular Steel Tubes in Bending, Donald R. Sherman, ST11:Nov 76:2181:12568

Steels

A Brief History of the Steel Joist Industry, Robert C. Macomber, Preprint No.2758, Sept 76, 12pp.
Column Design by P Delta Method, Brian R. Wood, Denis Beaulieu and Peter F. Adams, ST2:Feb 76: 411:11936
Commentary on Orthotropic-Deck Bridge Specifications, Charles G. Schilling, Chmn., ST1:Jan 74:109:10273
Containment Vessel Design —ASME Section III Division 1 Versus Division 2, Norman W. Edwards, STN75:Dec 75:II-361
Deflection and Ponding of Steel Joists, R. Richard Avent, ST7:July 76:1399:12241
Design Applications: The SSRC Guide, Third Edition, Bruce G. Johnston, Preprint No.2802, Sept 76, 33pp.
Design Criteria for H-Columns under Biaxial Loading, Negussie Tebedge and Wai F. Chen, ST3: Mar 74:579:10400
Effects of Elevated Temperature on Structural Members, Tasnim Uddin and Charles G. Culver, ST7:July 75:1531:11440

Elements of Steel Structures — History, State-of-the-Art, and Potential Developments: Columns, Reidar Bjorhovde, Preprint No.2786, Sept 76, 24pp.
Further Aspects of Design by P-Δ Model, Brian R. Wood, Denis Beaulieu and Peter F. Adams, ST3: Mar 76:487:11973
Inelastic Strength of Cold-Formed Steel Beams, H. Peter Reck, ST11:Nov 75:2193:11713
Inelastic Sway Buckling of Multistory Frames, Francois Cheong-Siat-Moy, ST1:Jan 76:65:11848
Local Buckling of Tubular Steel Columns, Alexis Ostapenko and Stephen X. Gunzelman, ST76:Aug 76:549
New Era in Fire Protective Coatings for Steel, William A. Rains, CE:Sept 76:80
Open Steel Box Sections with Top Lateral Bracing, Robert E. McDonald, Yeou-San Chen, Cetin Yilmaz and Ben T. Yen, ST1:Jan 76:35:11850
Optimum Steel Distribution in Corner Slabs, Ganpat S. Pandit and Subodh C. Sharma, TN: ST12:Dec 76:2360:12593
Past 50-Year Development of Constructional Steels, Ralph D. Webb, John A. Gilligan and Roland M. Brown, CO4:Dec 75:785:11753
Reinforced Concrete Materials — A Remarkable Heritage, Clyde E. Kesler, Preprint No.2755, Sept 76, 21pp.
Service Load and Fatigue Tests on Truss Bridges, Hotten A. Elleby, Wallace W. Sanders, Jr., F. Wayne Klaiber and M. Douglas Reeves, ST12:Dec 76:2285:12625
Shear Behavior of Steel Frame Joints, Helmut Krawinkler, Vitelmo V. Bertero and Egor P. Popov, ST11:Nov 75:2317:11717
Steels for the Sea, J. H. Gross, Preprint No.2732, Apr 76, 26pp.

Steel Structures

Birth of the Skyscraper, CE:July 76:61
Concrete Replaces Steel in Offshore Coal-Loading Terminal, A. G.F. Eddie, CE:Apr 76:60
Connections for Steel Structures — History, State of Art, and Potential Developments, John W. Fisher, Preprint No.2748, Sept 76, 21pp.
Design Applications: The SSRC Guide, Third Edition, Bruce G. Johnston, Preprint No.2802, Sept 76, 33pp.
Design of Columns Subject to Biaxial Bending, John Springfield, Preprint No.2750, Sept 76, 21pp.
Design of Steel Transmission Pole Structures, Gene M. Wilhoite, Chmn., ST12:Dec 74:2449:11009
La Guardia Airport Parking and Terminal Frontage Structure, Eugene J. Fasullo, CE:Mar 76:53
Local Buckling of Tubular Steel Columns, Alexis Ostapenko and Stephen X. Gunzelman, ST76:Aug 76:549
Preliminary Plastic Design of Tall Steel Frames, M. Bassam El Hafez and Graham H. Powell, ST9:Sept 74:1837:10796
Some Esthetic Considerations in Steel Design, Thomas C. Kavanagh, ST11:Nov 75:2257:11718
Subassemblage Concept for Tall Frame Analysis, Graham H. Powell and M. Bassam El Hafez, ST8: Aug 74:1611:10739
Thinking Aesthetically is a Part of Structural Engineering, Frederick M. Law, ST76:Aug 76:1
Utilization of Cold Work in Cold-Formed Steel, Niels C. Lind and Dilip K. Schroff, ST1:Jan 75:67:11043

Stephen D. Bechtel Award

1976 Stephen D. Bechtel Pipeline Engineering Award Presented to Kenneth E. Britain, CE:Oct 76:100

Stereographic Projection

A Stability Study of a Concrete Arch Dam Rock Abutment, Edward C.K. Tom, Nestor T. Mirafuente and Efren Estrella, GT76:Aug 76:264

Stereoscopic Map Plotters

Automatic Surveying — Updating Canada's Control, Leslie O'Brien, CE:Feb 76:57

Stiffeners

Buckling Strength of Multiple Stiffened Plates, Akio Hasegawa, Koji Oto and Fumio Nishino, ST76:Aug 76:937
Fatigue of Periodically Overloaded Stiffener Detail, Ali Abtahi, Pedro Albrecht and George R. Irwin, ST11:Nov 76:2103:12516

Stiffening

Unstiffened Compression Elements, V. Kalyanaraman, Teoman B. Pekoz and George Winter, Preprint No.2807, Sept 76, 38pp.

Stiffness

Analysis of Reinforced Fibrous Concrete Beams, Charles H. Henager and Terrence J. Doherty, ST1: Jan 76:177:11847
Cable-Stayed Versus Classical Suspension Bridge, Walter Podolny, Jr., TE2:May 76:291:12130
Calculation of Steel Diaphragm Behavior, J. Michael Davies, ST7:July 76:1411:12254
Constrained and Shear Moduli for Finite Element, Vincent P. Drnevich, GT5:May 75:459:11319
Cracking Analysis of Reinforced Concrete Plates, Maharaj K Wanchoo and Gerald W. May, ST1:Jan 75:201:11059
Ductile Behavior of Coupled Shear Walls, Thomas Paulay and Arumbakkam R. Santhakumar, ST1:Jan 76:93:11852
Effective Modulus of Twisted Wire Cables, George A. Costello and James W. Phillips, EM1:Feb 76: 171:11944
Effect of Foundation Stiffness on Track Buckling, Yehia M. El-Aini, EM3:June 76:531:12216
Estimating Damping of Real Structures, Jon D. Raggett, ST9:Sept 75:1823:11554
Forced Vibrations of Strip Footings on Layered Soils, George C. Gazetas and Jose M. Roesset, ST76:Aug 76:115
Frame Collapse Using Tangent Stiffness, William Tranberg, Peter Swannell and John L. Meek, ST3: Mar 76:659:11979
Full Range Analysis of Eccentrically Stiffened Plates, Anton W. Wegmuller, ST1:Jan 74:143:10286
Lateral Loading of Deep Foundations in Stiff Clay, Lymon C. Reese and Robert C. Welch, GT7:July 75:633:11456
Multispan Stayed Girder Bridges, Niels J. Gimsing, ST10:Oct 76:1989:12470
Multistory Frame Design Using Story Stiffness Concept, Francois Cheong Siat Moy, ST6:June 76: 1197:12221
A New Concept for the Relative Rigidity of Rafts, B. Ramanathan, NMG:June 76:I-489
Nonconforming Finite Element Analysis of Shells, Chang-Koon Choi and William C. Schnobrich, EM4:Aug 75:447:11504
Nonlinear Analysis of Reticulated Space Trusses, Dharapuram S. Jagannathan, Howard I. Epstein and Paul P. Christiano, ST12:Dec 75:2641:11799
On the Accuracy of the Solution of Finite Element Equilibrium Equations, Klaus-Jurgen Bathe, NMG: June 76:I-82
Shear Behavior of Steel Frame Joints, Helmut Krawinkler, Vitelmo V. Bertero and Egor P. Popov, ST11:Nov 75:2317:11717
Stiffness Coefficients for Embedded Footings, Gordon R. Johnson, Paul P. Christiano and Howard I. Epstein, GT8:Aug 75:789:11522
Survey of Nozzle Piping Reaction Criteria for Mechanical Equipment, Richard A. Meyer, STN75: Dec 75:II-283
Tension Proof Loading for Southern Pine Beams, M. Dee Strickler and Roy F. Pellerin, ST3:Mar 76:645: 11978
Three-Dimensional Analysis of Vertical Pile Groups, Prasanta K. Banerjee and Richard M. Driscoll, NMG:June 76:I-438
Trapezoidally Corrugated Plates in Shear, M. Iqbal Hussain and Charles Libove, ST5:May 76:1109: 12159

Stiffness Matrix
Nonlinear Cable and Frame Interaction, Kuang-Han Chu and David Chia-Chiun Ma, ST3:Mar 76:569: 12008

Stiffness Methods
Analysis of Tall Buildings Using Member Groups, David J. Harman and William H. Walker, ST3:Mar 75:567:11173
Full Range Analysis of Eccentrically Stiffened Plates, Anton W. Wegmuller, ST1:Jan 74:143:10286
Multistory Frame Design Using Story Stiffness Concept, Francois Cheong Siat Moy, ST6:June 76: 1197:12221
Roundoff Error Characteristics in Direct Stiffness Solutions, Farouk S. Nasser, ST76:76:374

Stilling Basins
Hydraulic Design for an Outlet Structure, Clifford D. Smith, WW76:Aug 76:1019
Stilling Basin Design for Low Froude Number, Nani G. Bhowmik, HY7:July 75:901:11448
Vortex Suppression in Stilling Pond Overflow, Y. R. Reddy and John Pickford, HY11:Nov 74:1685: 10969

Stilling Wells
Hydraulic Design of Vertical Stilling Wells, Philip H. Burgi, HY7:July 75:801:11451

Stochastic Models
Characterization and Models of the Watershed Storage Process, A. R. Rao, Pen-Chih Tao and C. Rukvichai, Preprint No.2663, Apr 76, 27pp.
Mean Estimate Deficiencies in Water Quality Studies, Barry J. Adams and Robert S. Gemmell, HY7:July 75:989:11450
Seasonal and Nonseasonal ARMA Models in Hydrology, Pen-Chih Tao and Jacques W. Delleur, HY10:Oct 76:1541:12477

Stochastic Processes
Mild Slope Stable Channels — A Stochastic Design Approach, Bent A. Christensen, Preprint No.2680, Apr 76, 14pp.
Response to Stochastic Wind of N-Degree Tall Buildings, William E. Saul, P. Jayachandran and Alain H. Peyrot, ST5:May 76:1059:12112
Simulation of N-Degree Stochastic Wind Force Vector for the Three-Dimensional Dynamic Analysis of Tall Buildings, P. Jayachandran and William E. Saul, ST76:Aug 76:269
Solid Particle Settlement in Open-Channel Flow, Ruh-Ming Li and Hsieh W. Shen, HY7:July 75:917: 11460
Stochastic Analysis of Floor Loads, Ross B. Corotis and Viresh A. Doshi, ST76:Aug 76:72
Stochastic Analysis of Trickling Filter, Khurshed J. Mistry and David M. Himmelblau, EE3:June 75: 333:11362
A Stochastic Approach to the Colorado River Basin, William L. Lane, Albert E. Gibbs and Robert B. Main, Preprint No.2684, Apr 76, 26pp.

Stock Ponds
Evaporation Reduction with Reflective Covers, Keith R. Cooley and Lloyd E. Myers, IR3:Sept 73:353: 9982

Stock Water
Estimating Stock Water Use in Rural Water Systems, Robert S. Schulz and T. Al Austin, HY1:Jan 76:15: 11843

Storage
Theory of Storage and Treatment-Plant Overflows, Charles D.D. Howard, EE4:Aug 76:709:12310

Storage Tanks
Flow Equalization—Plus for Wastewater Treatment Plants, Virginia Fairweather, CE:Sept 75:66
Seismic Design of Liquid-Storage Tanks, Howard I. Epstein, ST9:Sept 76:1659:12380
Urban* Runoff Pollution Control—State-of-the-Art, Richard Field and John A. Lager, EE1:Feb 75:107: 11129

Storm Drains
Design of Storm Sewer Networks, Ben Chie Yen and Ahmet Suha Sevuk, EE4:Aug 75:535:11503
Nonpoint Sources of Pollution: A Federal Perspective, Mark A. Pisano, EE3:June 76:555: 12211

Storm Runoff
Volume of Storm Water Retention Basins, Chester J. Ordon, EE5:Oct 74:1165:10889

Storms
The Accelerated Deep Water Development System, R. D. Walker and J. J. Zdeb, Preprint No.2677, Apr 76, 30pp.
Analysis of Offshore Concrete Caisson Dikes under Cyclic Loading, John T. Christian and Jean M.E. Audibert, NMG:June 76:II-979
Chow's General Hydrologic Model, Fazal H. Chaudhry, Maria A. Simoes and Walter M. Ferreira Filho, TN: HY9:Sept 76:1387:12368
Emergency Protection for Flood Damaged Streams, Donald W. Shanklin, IR76:July 76:85
Estimation of Lateral Inflow Hydrographs, Maria Mimikou and Ramachandra A. Rao, WW76:Aug 76:399
Estimation of Washload Produced on Certain Small Watersheds, Oswald Rendon-Herrero, HY7:July 74: 835:10638
Fifty-Year Development of Upstream Flood-Control Works Construction, Charlie M. Moore, CO3:Sept 75:477:11543
Flood Peaks in Southern California Desert Areas, George E. Ribble, WW76:Aug 76:1094
The Hydrology of the Upper 12-in. (30-cm) of Well-Drained, Imperfectly Drained, and Poorly Drained Mineral Soil Profiles, Peter S. Chisholm and Robert W. Kirkness, IR76:July 76:193
Model of Hurricane Tide in Cape Fear Estuary, James E. Overland and Vance A. Myers, WW4: Nov 76:407:12549
Probability Distributions of Extreme Wind Speeds, Emil Simiu and James J. Filliben, ST9:Sept 76: 1861:12381
Rainfall Temporal Patterns for Design Floods, David H. Pilgrim and Ian Cordery, HY1:Jan 75:81:11057
Stochastic Considerations in Thunderstorm Modeling, Ross B. Corotis, HY7:July 76:865:12231
Tornado Design Winds Based on Risk, Robert C. Garson, Jose Morla Catalan and C. Allin Cornell, ST9:Sept 75:1883:11559
Vortex Suppression in Stilling Pond Overflow, Y. R. Reddy and John Pickford, HY11:Nov 74:1685: 10969
Water Quality Aspects of Agricultural and Urban Drainage, Philip B. Bedient and William G. Characklis, IR76:July 76:374
Window Glass Failures in Windstorms, Joseph E. Minor and W. Lynn Beason, ST1:Jan 76:147:11834

Storm Sewers
Development of Storm Drainage Cost Functions, Neil S. Grigg and John P. O'Hearn, HY4:Apr 76: 515:12069
Laboratory Study of Energy Losses at Storm Sewer Junctions, Jan R. Prins and David R. Townsend, IR76:July 76:609
Optimal Risk-Based Design of Storm Sewer Networks, Wilson H. Tang, Larry W. Mays and Ben Chie Yen, EE3:June 75:381:11360
QUURM — Implications for the Design of Urban Drainage Systems, W. Edgar Watt, Kenneth C. Wilson and Joan E. Eaton, IR76:July 76:580
Risk-Safety Factor Relation for Storm Sewer Design, Ben Chie Yen and Wilson H. Tang, TN: EE2:Apr 76:509:12016
Storm Water Management for the Merivale Industrial Area — Township of Nepean, J. C. Anderson, IR76:July 76:593

Urban Runoff Pollution Control—State-of-the-Art, Richard Field and John A. Lager, EE1:Feb 75:107: 11129

Storm Surges
Analytical Prediction of Shoreline Erosion, John S. Fisher, Leif F. Gulbrandsen and Victor M. Goldsmith, OE75:June 75:161
Circulation and Surge Modeling in Pamlico Sound, N.C., Michael Amein and Damodar S. Airan, Preprint No.2665, Apr 76, 29pp.
Design Basis Flooding at Offshore Reactor Sites, Ronald M. Noble, OE75:June 75:89
Flood Protection of Crystal River Unit 3 Nuclear Plant, Ronald M. Noble and Bert Simpson, PO1: July 75:85:11458
Recurrence Intervals of Abnormally High Tides by Superposition of Storm Surges over Astronomical Tides, Raymond K. DeYoung and James R. Pfafflin, OE75:June 75:79
Transient Drainage Flow Analysis for a Coastal Site, Yung-chi Chang and Yun-jui Tsai, OE75:June 75: 1046
Wind-Driven Flow of Water Influenced by a Canopy, Robert O. Reid and Robert E. Whitaker, WW1:Feb 76:61:11926

Storm Water
Hydrologic Impact of Planned Unit Developments, Richard H. McCuen and Harry W. Piper, UP1:May 75:93:11329
Pollutional Analysis of Combined Sewer Systems, Oddvar Georg Lindholm, EE2:Apr 76:301:12030
Storm Water Management for the Merivale Industrial Area — Township of Nepean, J. C. Anderson, IR76:July 76:593
Stormwater Studies and Alternatives in Atlanta, Robert F. Holbrook, Armando I. Perez, Billy G. Turner and Herbert I. Miller, EE6:Dec 76:1263: 12614
Three Towns: Three Different Solutions to Stormwater Control, Charles F. Hemming, CE:Sept 76:65
Volume of Storm Water Retention Basins, Chester J. Ordon, EE5:Oct 74:1165:10889
208: A Process for Water Quality Management, Mark A. Pisano, CE:Nov 76:55

Strain
Analysis of Shear-Induced Anisotropy in Leda Clay, K. T. Law and Kwan Y. Lo, NMG:June 76:I-329
Anisotropy for Finite Element Analysis, Ravikumar Bhaskaran, NMG:June 76:I-345
Rock Squeeze Study of Two Deep Excavations at Niagara Falls, C. F. Lee and Kwan Y. Lo, GT76: Aug 76:116
Yielding of Sand in Plane Strain, Sam Frydman, GT5:May 74:491:10540

Strain Energy
Compressibility of Undisturbed Submarine Sediments, William F. Brumund and Gordon W. Callender, Jr., OE75:June 75:363

Strain Gages
Shaft Failure of Large Axial Flow Pumps, Christopher A. Gardner and Howard T. Hill, PO2: Nov 76:209:12575

Strain Hardening
Behavior of Cold-Rolled Stainless Steel Members, Shien T. Wang, Samuel J. Errera and George Winter, ST11:Nov 75:2337:11724
Design Criteria for Anchor Cables and Bolting in Underground Openings, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:II-859
Instability, Ductility, and Size Effect in Strain-Softening Concrete, Zdenek P. Bazant, EM2:Apr 76:331:12042
Limit Load of a Foundation in a Strain-Softening Soil, Paolo Biondi, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:I-591
Strain Hardening and Aging in Cold-Formed Steel, Kenneth W. Karren and Mahendrasinhji M. Gohil, ST1:Jan 75:187:11067
Stress Analysis of Strain-Softening Materials, Stein Sture and Hon-Yim Ko, NMG:June 76:I-580
Utilization of Cold Work in Cold-Formed Steel. Niels C. Lind and Dilip K. Schroff, ST1:Jan 75:67:11043

Strain Rate
Creep of Sand-Ice System, Robert G. Rein, Jr., Vidyutkumar V. Hathi and Cedomir M. Sliepcevich, GT2:Feb 75:115:11134

Strains
Analysis of Pressuremeter in Strain-Softening Soil, Jean-Herve Prevost and Kaare Hoeg, GT8:Aug 75: 717:11488
Bending Strength of Rectangular Hallow Sections, Ray R. Ayers, James M. Nash and William J. Graff, ST76:Aug 76:439
Constitutive Laws for Sand in Dynamic Shear, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, NMG:June 76:I-270
Constrained and Shear Moduli for Finite Element, Vincent P. Drnevich, GT5:May 75:459:11319
Effective Stress-Strain-Strength Model for Soils, Jean-Herve Prevost and Kaare Hoeg, GT3:Mar 75:259: 11157
Evaluation of Three Stress-Strain Models for Soils, Jean-Marie J. Vagneron, Poul V. Lade and Kenneth L. Lee, NMG:June 76:III-1329
Influence of Soil Models on Seismic Response, Adekunle Oguntala, NMG:June 76:II-1060
Interpretation of Torsion Shear Tests on Sand, Poul V. Lade, NMG:June 76:I-381
Laterally Loaded Pipe Pile in Cohesionless Soil, Helmut E. Meissner, NMG:June 76:III-1353
Literature Surveys of Cold-Formed Structures, Ken P. Chong, Chmn., Preprint No.2807, Sept 76, 59pp.
New Rheological Model for Soil Behavior, Fujiya Komamura and Rodney J. Huang, GT7:July 74:807: 10675
On an Improved Application of Kotter's Equation, Hakuju Yamaguchi, Tsutomu Kimura and Nariaki Fuji-i, NMG:June 76:I-183
Performance of a Cellular Sheetpile Wharf, Warren L. Schroeder, Dennis K. Marker and Thanasarn Khuayjarernpanishk, Preprint No.2731, Apr 76, 28pp.
Roundoff Error Characteristics in Direct Stiffness Solutions, Farouk S. Nasser, ST76:76:374
Session 6: Soil Structure Interaction — Nonlinear Effects, Eduardo Kausel, STN75:Dec 75:II-223
Strength and Related Properties of Brick Masonry, Clayford T. Grimm, ST1:Jan 75:217:11066
Stress-Strain Behavior of Soft Bangkok Clay, A. S. Balasubramaniam and A. R. Chaudhry, NMG:June 76:I-390
Study of Three-Flight Free-Standing Staircases, Simon F. Ng and Alvar T. Chetty, ST7:July 75: 1419:11434
Undrained Stress-Strain-Time Behavior of Clays, Jean-Herve Prevost, GT12:Dec 76:1245:12644

Stratification
Effect of Wind Stress on Stratified Deep Lake, Niels-Erik Ottesen Hansen, HY8:Aug 75:1037:11484
Effects of Destratification on Depth Distribution of Fish, Glen E. Gebhart and Robert C. Summerfelt, EE6:Dec 76:1215:12608
Role of Eddy Diffusivity in Thermocline Formation, Brian Henderson-Sellers, EE3:June 76:517:12174
Salinity Intrusion Mechanisms in Estuaries, John M. Hamrick, OE75:June 75:1382
Selective Withdrawal Criteria of Stratified Fluids, Timothy W. Kao, HY6:June 76:717:12188
Steady Stratified Circulation in a Cavity, Der-Liang Young, James A. Liggett and Richard H. Gallagher, EM1:Feb 76:1:11903
Temperature Dynamics in Dimictic Lakes, Heinz Stefan and Dennis E. Ford, HY1:Jan 75:97:11058
Unsteady Stratified Circulation in a Cavity, Der-Liang Young, James A. Liggett and Richard H. Gallagher, EM6:Dec 76:1009:12643

Stratified Flow
Experimental Study of Turbulent Stratified Shearing Flow, Vincent H. Chu and Madanlal R. Vanvari, HY6:June 76:691:12205
Jet Discharge into a Stratified Reservoir, Rufus B. Darden, Jorg Imberger and Hugo B. Fischer, HY9: Sept 75:1211:11583
Stratified Flow in Great Salt Lake Culvert, Edward R. Holley and Kidd M. Waddell, HY7:July 76:969: 12250

Stream Channels
Vegetative Management of Water Hyacinths, Edward O. Gangstad, WW76:Aug 76:672

Stream Flow
Applicability of Unit Stream Power Equation, Chih Ted Yang and John B. Stall, HY5:May 76:559: 12103
Determining Streamflows from Geomorphic Parameters, John F. Orsborn, IR4:Dec 74:455: 10986
Estimating Flow Conditions for River Models, William J. Grenney and David S. Bowles, EE4:Aug 76:693:12297
An Event-Based Formulation of Watershed Management, Martin M. Fogel, Lucien Duckstein and Andre Musy, IR76:July 76:349
Flow Regulation Effects on Stream Flow Prediction, Carl Mark Koch, WW76:Aug 76:627
Low Flow Modeling in Small Steep Watersheds, David S. Bowles and J. Paul Riley, HY9:Sept 76: 1225:12405
Mechanism for Streamflow Meandering, Michael C. Quick, HY6:June 74:741:10587
Missouri River Stage-Discharge Shift, A. D. Berryman, Howard E. Christian and Everett V. Richardson, WW76:Aug 76:1350
Nonequilibriun River Form, Michael A. Stevens, Daryl B. Simons and Everett V. Richardson, HY5: May 75:557:11334

Streamflow Depletion
South Platte River Flow Correlations, Robert E. Glover, IR3:Sept 75:175:11563

Streamflow Forecasting
An Event-Based Formulation of Watershed Management, Martin M. Fogel, Lucien Duckstein and Andre Musy, IR76:July 76:349
Lower Minnesota River — Capacity Study, Amardo J. Romano, WW76:Aug 76:687

Streamflow Regulation
Water Quality Dimensions of Water Resources Planning, David H. Howells, HY2:Feb 75:277: 11146

Stream Gages
Discharge Computations at River Control Structures, Dannie L. Collins, HY7:July 76:845:12237
Mississippi River Regime Analysis, Wallace H. Walters, Jr., WW76:Aug 76:730
Prediction of Mixing Lengths for River Flow Gaging, Peter R.B. Ward, HY7:July 73:1069:9856
Upstream Flood Lowering in Reservoirs, Bob Buehler, HY2:Feb 76:151:11911

Stream Improvement
Mathematical Model to Simulate Channel Deformation, Purshottam Dass and Daryl B. Simons, WW76:Aug 76:1

Stream Pollution
DO-Sag in Oscillating Flow, Wen-Hsiung Li and Michael Edwin Kozlowski, EE4:Aug 74:837:10713

Streams
Effects of Man on Low Flows, Henry C. Riggs, IR76: July 76:306
Emergency Protection for Flood Damaged Streams, Donald W. Shanklin, IR76:July 76:85
Estimation of Washload Produced on Certain Small Watersheds, Oswald Rendon-Herrero, HY7:July 74: 835:10638
Finite Element Solution of Saint-Venant Equations, Richard L. Cooley and Syed Afaq Moin, HY6:June 76:759:12213
Identifying Urban Flash Flooding Problems, William P. Darby and Mitchell J. Small, WR2:Nov 76:349: 12571
Influence of Equivalent Sand Roughness on the Dispersion Coefficient in Laboratory and Natural Streams, Ho-Shong Hou and Bent A. Christensen, WW76:Aug 76:1179
Limestone Barriers to Neutralize Acidic Streams, Frank H. Pearson and Archie J. McDonnell, EE3: June 75:425:11382
Morphology of Cobble Streams in Small Watersheds, Ruh-Ming Li, Daryl B. Simons and Michael A. Stevens, HY8:Aug 76:1101:12304
New Diver-Operated Bedload Sampler, Dennis G. Waslenchuk, HY6:June 76:747:12179
Regional Sediment Yield Analysis of Alaska Streams, Gary L. Guymon, HY1:Jan 74:41:10255
River-Ice Problems: A State-of-the-Art Survey and Assessment of Research Needs, John F. Kennedy, Cochmn. and George D. Ashton, Cochmn., HY1: Jan 74:1:10281
Sediment Transport in a South Carolina Mountain Stream, Benjamin C. Dysart, III and Charles H. Langdon, III, IR76:July 76:56

Streets
Engineering Surveying: Chapters 2, 5, 6, 8, 16, and 20, George M. Mayfield, Chmn., SU1:Dec 76:59: 12648
Maintenance of Delivery Services for Chicago's State Street Transit Mall, Thomas P. Kaeser, BP75:Dec 75:528
A Tool for Improving Social Service Delivery Systems in Urban Areas, Allen E. Shinder and Martin L. Reiss, BP75:Dec 75:366
Types of Street Use in New Orleans, John F. Exnicios, BP75:Dec 75:10

Strength
Anisotropy for Finite Element Analysis, Ravikumar Bhaskaran, NMG:June 76:I-345

Strength of Materials
Dual Failure Criterion for Plain Concrete, Han-Chin Wu, EM6:Dec 74:1167:10996
Fracture and Stress-Strain Relationship of Concrete Under Triaxial Compression, Ranga Palaniswamy and Surendra P. Shah, ST5:May 74:901:10547
Polymer-Impregnated Concrete: Laboratory Studies, Einar Dahl-Jorgensen, Wai F. Chen, John A. Manson, Yu-Nan Liu and John W. Vanderhoff, TE1:Feb 75:29:11101
Tension Proof Loading for Southern Pine Beams, M. Dee Strickler and Roy F. Pellerin, ST3:Mar 76:645: 11978

Stress
Comparison of Boundary Integral Equation and FE Methods, Shien T. Wang and George E. Blandford, TN: ST9:Sept 76:1941:12370
A Numerical Solution for Viscoelastic Half Planes, Gautam Dasgupta, EM4:Aug 76:601:12325
Swelling Rock: A Review, Ernest N. Lindner, GT76: Aug 76:141

Stress Analysis
Elastoplastic Torsion of Anisotropic Bars, Pravit Boonlualohr and Somasundaram Valliappan, EM6: Dec 76:995:12634
Pipeline Stress Analysis, Jamal J. Azar, John G. Bomba and Verle G. Randolph, TE1:Feb 75:163: 11122
Refined Stress Analysis of Human Aortic Heart Valves, Altay Cataloglu, Phillip L. Gould and Richard E. Clark, EM1:Feb 76:135:11924
Simulation of the Stress Computation in Shells, M. Salama and Senol Utku, Preprint No.2737, Sept 76, 32pp.

Stress Concentration
Response of Flexible Pavements to Multiple Loads, Yu Tang Chou, Ronald L. Hutchinson and Harry H. Ulery, Jr., TE2:May 75:247:11307

Stress Cycle
Sand Liquefaction in Large-Scale Simple Shear Tests, Pedro De Alba, H. Bolton Seed and Clarence K. Chan, GT9:Sept 76:909:12403

Stress Distribution
In-Situ Undrained Shear Strength of Two Marine Clays, Demetrious Koutsoftas and Joseph A. Fischer, GT9:Sept 76:989:12431
Numerical Analysis of Thermal Crack Propagation in Pavement Overlays, H. S. Chang, Robert L. Lytton and S. H. Carpenter, NMG:June 76:I-526
Shear Analysis of Tapered Beams, Ken P. Chong, William D. Swanson and Robert B. Matlock, ST9: Sept 76:1781:12411
Stress Distribution for Heavy Embedded Structures, Kul Bhushan and Steven C. Haley, TN: GT7:July 76:807:12227

Stresses
Analysis of Pressuremeter in Strain-Softening Soil, Jean-Herve Prevost and Kaare Hoeg, GT8:Aug 75: 717:11488
Analysis of Reinforced Fibrous Concrete Beams, Charles H. Henager and Terrence J. Doherty, ST1: Jan 76:177:11847
Analysis of Shear-Induced Anisotropy in Leda Clay, K. T. Law and Kwan Y. Lo, NMG:June 76:I-329
Anisotropy for Finite Element Analysis, Ravikumar Bhaskaran, NMG:June 76:I-345
Applications of Integral Equation Method to Some Geomechanical Problems, Yoshiji Niwa, Shoichi Kobayashi and Takuo Fukui, NMG:June 76:I-120
Approximate Analysis of Multistory Multibay Frames, Paul C.K. Chan, Arthur C. Heidebrecht and Wai K. Tso, ST5:May 75:1021:11302
Axial Compression of Formed-Faced Sandwich Panels, Ken P. Chong, Pei-Chung Liu and Kjell Oistein Engen, Preprint No.2807, Sept 76, 22pp.
Bearing Strength of Reinforced Concrete Blocks, Sanat Kumar Niyogi, ST5:May 75:1125:11325
Behavior of Fabricated Tubular Columns Under Biaxial Bending, Wai F. Chen and D. A. Ross, Preprint No.2659, Apr 76, 21pp.
Buckling Stress States of Hyperboloidal Shells, Ihsan Mungan, ST10:Oct 76:2005:12465
Computer Analysis of Segmentally Erected Bridges, Robert C. Brown, Jr. and Ned H. Burns, ST4:Apr 75:761:11218
Concrete Bearing Strength—Support, Mix, Size Effect, Sanat Kumar Niyogi, ST8:Aug 74:1685: 10765
Constrained and Shear Moduli for Finite Element, Vincent P. Drnevich, GT5:May 75:459:11319
Construction Helmet Response Under Severe Impact, Werner Goldsmith, CO2:June 75:335:11349
An Effective Stress Model for Liquefaction, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, Preprint No.2752, Sept 76, 30pp.
Evaluation of Three Stress-Strain Models for Soils, Jean-Marie J. Vagneron, Poul V. Lade and Kenneth L. Lee, NMG:June 76:III-1329
Field Problems of Latticed Structures, Lev Zetlin, Joseph F. Thelen and Daniel A. Cuoco, ST11:Nov 75:2241:11711
Finite Element Analysis of Large Deformation in Slopes, Nimitchai Snitbhan and Wai F. Chen, NMG:June 76:II-744
Improved Two-Dimensional Finite Element, Robert D. Cook, ST9:Sept 74:1851:10808
In Situ Measurement of Initial Stress and Deformation Characteristics, C. Peter Wroth, GT75:June 75:II-181
Interpretation of Torsion Shear Tests on Sand, Poul V. Lade, NMG:June 76:I-381
Laterally Loaded Pipe Pile in Cohesionless Soil, Helmut E. Meissner, NMG:June 76:III-1353
Literature Surveys of Cold-Formed Structures, Ken P. Chong, Chmn., Preprint No.2807, Sept 76, 59pp.
Local Buckling of Tubular Steel Columns, Alexis Ostapenko and Stephen X. Gunzelman, ST76:Aug 76:549
Modal Analysis for Impact of Layered Plates, James T. Kubo and Richard B. Nelson, EM1:Feb 75:45: 11133
New Rheological Model for Soil Behavior, Fujiya Komamura and Rodney J. Huang, GT7:July 74:807: 10675
Nonlinear Analyses in Soil and Solid Mechanics, Hugh L. Davidson and Wai F. Chen, NMG:June 76:I-205
Roundoff Error Characteristics in Direct Stiffness Solutions, Farouk S. Nasser, ST76:76:374
Significance of Variably Confined Triaxial Testing, John J. Allen and Marshall R. Thompson, TE4:Nov 74:827:10911
Simplified Analysis of Framed-Tube Structures, Alexander Coull and Bishwanath Bose, ST11:Nov 75:2223:11696
Soil-Structure Interaction of Concrete Pipe Systems, Raymond J. Krizek, Ross B. Corotis and Thomas H. Wenzel, ST76:Aug 76:607
Static Stresses by Linear and Nonlinear Methods, Kenneth L. Lee and Izzat M. Idriss, GT9:Sept 75: 871:11542
Strength and Related Properties of Brick Masonry, Clayford T. Grimm, ST1:Jan 75:217:11066
Stresses in GRP Cylinders with Radial Line Load, Fred C. McCormick and Richard T. Hunt, EM4: Aug 75:417:11520
Stresses in Shallow Elliptical Tunnel, Robert Mark, TN: GT11:Nov 76:1187:12513
Stresses in Soils due to Vertical Load on Piles, Verendra Singh, NMG:June 76:I-451
Stresses on Shallow Circular Pipe by Transformed Section, Rowland Richards, Jr. and Jagdish S. Agrawal, GT6:June 74:637:10631
Stress-Path Dependent Deformation Moduli of Clay, Yudhbir and A. Varadarajan, GT3:Mar 75:315: 11198
Stress-Strain Behavior of Soft Bangkok Clay, A. S. Balasubramaniam and A. R. Chaudhry, NMG:June 76:I-390
Tapered Plane Stress Annular Sector Finite Element, Victor A. Pulmano, EM4:Aug 75:349:11498
Tests of Welded Steel Beam-to-Column Moment Connections, John Parfitt, Jr. and Wai F. Chen, ST1:Jan 76:189:11854
Thermal Loading of Thin-Shell Concrete Cooling Towers, Richard D Larrabee, David P. Billington and John F. Abel, ST12:Dec 74:2367:11002
Three-Dimensional Analysis of Vertical Pile Groups, Prasanta K. Banerjee and Richard M. Driscoll, NMG:June 76:I-438
Torsion of Frame-Tube Structures, Alexander Coull and Bishwanath Bose, TN: ST12:Dec 76:2366: 12593
Transmission Towers Under Torsional Loads, Albert W.G. Hanna and Richard G. Redwood, PO1:May 73:105:9701
Trapezoidally Corrugated Plates in Shear, M. Iqbal Hussain and Charles Libove, ST5:May 76:1109: 12159
Undrained Stress-Strain-Time Behavior of Clays, Jean-Herve Prevost, GT12:Dec 76:1245:12644
Viscoelastic Analysis About Deformation of Weak Ground, Tomoyuki Akagi, Yoshinori Ito and Makoto Irobe, NMG:June 76:II-639
Wheel Load Stress Concentrations on Crane Runway Girders, G. J.K. Asmis, ST76:Aug 76:1005

Stress Measurement
Boundary Shear Stress Measurement by Preston Tube, Malcolm Hollick, TN: HY7:July 76:1053: 12228
A General Function for Stress-Strain Curves, Chandrakant S. Desai and Tien H. Wu, NMG:June 76:I-306

Stress Meters
Evaluation of Stress Cell Performance, Raymond J. Krizek, M. Hassan Farzin, Anwar E.Z. Wissa and R. Torrence Martin, GT12:Dec 74:1275:11030

Stress Relaxation
Response of Flexible Pavements to Multiple Loads, Yu Tang Chou, Ronald L. Hutchinson and Harry H. Ulery, Jr., TE2:May 75:247:11307

Stress Relieving
Stress Analysis of Strain-Softening Materials, Stein Sture and Hon-Yim Ko, NMG:June 76:I-580

Stress Strain Characteristics
Analysis of Buried Pipe Under Embankment, Shamsher Prakash, Gyan C. Nayak and R. Gupta, NMG:June 76:II-886
Anisotropy and Stress Reorientation in Clay Under Load, Hideki Ohta and C. Peter Wroth, NMG:June 76:I-319
Anisotropy for Finite Element Analysis, Ravikumar Bhaskaran, NMG:June 76:I-345
A Constitutive Equation for Normally Consolidated Clays, Toshihisa Adachi, NMG:June 76:I-282
Constitutive Equations and Punch-Indentation of Concrete, Andrie C.T. Chen and Wai F. Chen, EM6:Dec 75:889:11809
Constitutive Laws for Sand in Dynamic Shear, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, NMG:June 76:I-270
Elasto-Plastic Finite Element Analyses of Sand Deformations, Yoshio Ozawa and James M. Duncan, NMG:June 76:I-243
Finite Element Analysis of Stresses and Movements in Excavations, Hiromitsu Izumi, Katsumi Kamemura and Seiichi Sato, NMG:June 76:II-701
Limit Load of a Foundation in a Strain-Softening Soil, Paolo Biondi, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:I-591
Nonlinear Behavior in Soil-Structure Interaction, Eduardo Kausel, Jose M. Roesset and John T. Christian, GT11:Nov 76:1159:12579
On Constitutive Laws for Soils and Rocks, Gerd Gudehus, NMG:June 76:III-1305
Response of Footings on Micaceous, Cohesionless Soils, Jean M.E. Audibert, Nabil F. Ismael and G. Wayne Clough, NMG:June 76:I-567
Rheological Model of Laterally Stressed Frozen Soil, Khandker A. Aziz and Jan T. Laba, GT8:Aug 76:825:12316
Soil-Structure Interaction of Concrete Pipe Systems, Raymond J. Krizek, Ross B. Corotis and Thomas H. Wenzel, ST76:Aug 76:607
Stress and Stability Analyses of Underground Openings Taking Post-Failure Behavior of Rock into Consideration, T. Kawamoto and T. Saito, NMG:June 76:II-791
Stress-Deformation-Time Behavior of Dredgings, Abdelsalam M. Salem and Raymond J. Krizek, GT2:Feb 76:139:11917
Stress-Strain Behavior of Sand, Vijay K. Khosla and Tien H. Wu, GT4:Apr 76:303:12079

Stress-Strain Curves
Constitutive Relations for Concrete, Andrie C.T. Chen and Wai F. Chen, EM4:Aug 75:465:11529
Evaluation of Three Stress-Strain Models for Soils, Jean-Marie J. Vagneron, Poul V. Lade and Kenneth L. Lee, NMG:June 76:III-1329
A General Function for Stress-Strain Curves, Chandrakant S. Desai and Tien H. Wu, NMG:June 76:I-306
Incremental Stress-Strain Relationship for Cohesionless Soil, F. Darve, S. Labanieh and R. Chambon, NMG:June 76:I-264
Interpretation of Torsion Shear Tests on Sand, Poul V. Lade, NMG:June 76:I-381
Stress-Path Dependent Deformation Moduli of Clay, Yudhbir and A. Varadarajan, GT3:Mar 75:315:11198
Stress-Path Independent Behavior of Cohesionless Soil, Poul V. Lade and James M. Duncan, GT1:Jan 76:51:11841
Stress-Strain Properties of Compacted Clays, David E. Daniel and Roy E. Olson, GT10:Oct 74:1123:10869

Strip Mines
Oxygen Depletion and Sulfate Production in Strip Mine Spoil Dams, J. H. Amend, Dinshaw N. Contractor and Chandrakant S. Desai, NMG:June 76:II-1155

Strip Mine Wastes
Oxygen Depletion and Sulfate Production in Strip Mine Spoil Dams, J. H. Amend, Dinshaw N. Contractor and Chandrakant S. Desai, NMG:June 76:II-1155

Strip Mining
Philadelphia—Civil Engineering News Roundup, CE: June 76:60

Structural Analysis
Analysis of Beam-Columns on Elastic Supports, R. Richard Avent, Dieter Bounin and Hee Chong Rhee, TN: ST3:Mar 76:691:11956
Analysis of Tall Buildings Using Member Groups, David J. Harman and William H. Walker, ST3:Mar 75:567:11173
Application of Optimal Control Theory to Civil Engineering Structures, Jann-Nan Yang, EM6:Dec 75:819:11812
Applications of Photoelasticity to Structural Analysis, J. F. Jullien, R. Duhau and J. C. Cubaud, EM5:Oct 76:867:12486
Behavior of Fabricated Tubular Columns Under Biaxial Bending, Wai F. Chen and D. A. Ross, Preprint No.2659, Apr 76, 21pp.
The Bicentennial of Structural Engineering, Carl Hirsch, ST76:Aug 76:359
Circular Steel Tubes in Bending, Donald R. Sherman, Preprint No.2694, Apr 76, 27pp.
Civil Engineering Esthetics—State-of-the-Art, Clayford T. Grimm and Wolfgang F.E. Preiser, ST8:Aug 76:1531:12322
Computer-Aided Structural Analysis and Design of the 37-Story Bonaventure Hotel, Joseph P. Nicoletti, Dilip P. Jhaveri and Leroy Z. Emkin, ST76:Aug 76:796
Computer Graphics, Treatment for the Terminal Illness, H. N. Christiansen, Preprint No.2765, Sept 76, 20pp.
Concrete L-Beams Subject to Combined Torsional Loads, D. Wayne Kirk and David G. McIntosh, ST1:Jan 75:269:11064
Conventional Versus Integrated Courses in Structural Analysis and Design, William G. Murphy and William J. Hall, ST76:Aug 76:997
Finite Element Structural Analysis, An Overview, Richard H. Gallagher, Preprint No.2765, Sept 76, 28pp.
Finite Element Technology for Predicting Nonlinear Behavior of Structures, Robert J. Melosh and F. Hatt, Preprint No.2765, Sept 76, 20pp.
Flexural-Torsional Buckling of Curved Members, Porpan Vacharajittiphan and Nicholas S. Trahair, ST6:June 75:1223:11350
Full Range Analysis of Eccentrically Stiffened Plates, Anton W. Wegmuller, ST1:Jan 74:143:10286
Helicoidal Girders, Himat T. Solanki, TN: ST4:Apr 76:869:12076
History of the Theory of Bridge Structures, Bogdan O. Kuzmanovic, Preprint No.2738, Sept 76, 32pp.
Linear Structural Analysis of Multistory Buildings, R. Shankaran Nair, ST3:Mar 75:551:11163
Materials and Specification for Marine Structures, D. L. Frisby, OE75:June 75:818
Overall Elastic Stability of Multistory Buildings, R. Shankaran Nair, ST12:Dec 75:2487:11762
Plastic Design of Web Openings in Steel Beams, Marvin A. Larson and Kirit N. Shah, ST5:May 76:1031:12155
Probabilistic Analysis of Elastoplastic Structures, Thomas L. Paez and James T.P. Yao, EM1:Feb 76:105:11914
Progress Report of ASCE Ad Hoc Committee on Soil Structure Interaction, Izzat M. Idriss, STN75:Dec 75:II-236

Review of Structural Optimization Techniques, Kenneth F. Reinschmidt, Preprint No.2765, Sept 76, 20pp.
Seismic Supports for Electrical Cable Systems, Anil K. Kar and Sitansu S. Sinha, PO1:July 75:95:11464
Simplified Analysis of Wall-Frame Building Structures, Carlos A. Prato, TN: ST12:Dec 76: 2353:12593
Space Trusses with Brittle-Type Strut Buckling, Lewis C. Schmidt, Peter R. Morgan and John A. Clarkson, ST7:July 76:1479:12274
Sparse Matrix Operations in Finite Element Analysis, Caleb W. McCormick, Preprint No.2765, Sept 76, 20pp.
Structural Design of Large Space Telescope, Gerald W. Arnts, Jr., TE2:May 76:363:12132
Structural Response to Wave and Current Forces, Song S. Wu and Chi C. Tung, OE75:June 75:849
Survey of Structural Reanalysis Techniques, Jasbir S. Arora, ST4:Apr 76:783:12056
Systematic Substructuring, Senol Utku, ST4:Apr 75: 717:11244
Teaching Structural Analysis and Design Using Computers, Oktay Ural, Preprint No.2737, Sept 76, 8pp.
Time-Dependent Increase in Shear Modulus of Clay, Donald G. Anderson and Richard D. Woods, GT5: May 76:525:12147
Unreliability of Qualifying Active Mechanical Equipment by Testing Only, Ahmed E. Meligi, STN75:Dec 75:II-11
3-D Analysis of Laterally Loaded Structures, Chandrakant S. Desai and G. C. Appel, Jr., NMG: June 76:I-405

Structural Behavior

Structural Characteristics of Weathered Plywood, Michael O. Hunt and DeForest A. Matteson, Jr., ST4:Apr 76:759:12050

Structural Design

Aesthetics is a Do-It-Yourself Project, Raymond C. Reese, ST76:Aug 76:33
Bibliography on Wood and Plywood Diaphragms, J. M. Carney, ST11:Nov 75:2423:11737
Calculation of Steel Diaphragm Behavior, J. Michael Davies, ST7:July 76:1411:12254
Computer-Aided Design: Toward an Optimal Design of Concrete Structures, Yogindra N. Anand, Edward J. Rhomberg and Constancio F. Miranda, ST76:Aug 76:1060
Computer-Aided Structural Analysis and Design of the 37-Story Bonaventure Hotel, Joseph P. Nicoletti, Dilip P. Jhaveri and Leroy Z. Emkin, ST76:Aug 76:796
Computer Modeling and Testing of Timber Trusses for Design Instruction, Louis H. Klotz, Preprint No.2737, Sept 76, 30pp.
Concrete Encased Steel Columns—Design Tables, Richard W. Furlong, ST9:Sept 74:1865:10807
Conventional Versus Integrated Courses in Structural Analysis and Design, William G. Murphy and William J. Hall, ST76:Aug 76:997
Design of Cooling Towers for Wind, David P. Billington and John F. Abel, ST76:Aug 76:242
Design of Diaphragm-Braced I-Beams, David A. Nethercot and Nicholas S. Trahair, ST10:Oct 75: 2045:11615
Design of I-Shaped Beams with Diaphragm Bracing, Samuel J. Errera and Tamirisa V.S.R. Apparao, ST4:Apr 76:769:12051
Earthquake Design of Buildings:Damping, Gary C. Hart and Ramaswami Vasudevan, ST1:Jan 75:11: 11041
Elements of Steel Structures — History, State-of-the-Art, and Potential Developments: Columns, Reidar Bjorhovde, Preprint No.2786, Sept 76, 24pp.
Experts Critique the Olympic Structures of Montreal, CE:Dec 76:50
Folded-Plate Structures, Jerome S.B. Iffland, Preprint No.2807, Sept 76, 66pp.
Formal Representation of Design Requirements, Steven J. Fenves, ST76:Aug 76:739
A Heuristic Game for Material Selection in Structural Design Using the Hybrid Computer, Rick R. Evans, Subhash C. Anand and Myron Spector, Preprint No.2737, Sept 76, 25pp.
History of Steel Beam Design, Theodore V. Galambos, Preprint No.2776, Sept 76, 21pp.
Illustrations of Reliability-Based Design, Mayasandra K. Ravindra, Niels C. Lind and Wilfred W.C. Siu, ST9:Sept 74:1789:10779
Load Factor Analysis of Design of Bridges, James C. Porter, ST5:May 76:891:12098
A New Concept for the Relative Rigidity of Rafts, B. Ramanathan, NMG:June 76:I-489
Optimal Design of Plane Frames, Jasbir S. Arora, Edward J. Haug, Jr. and Kwan Rim, ST10:Oct 75: 2063:11633
Optimum Frame Design Using Available Sections, Kuan-Chen Fu and Kuang-Wei You, ST76:Aug 76: 1049
Parametric Studies as a Design Aid in Tunneling, K. Kovari, H. Hagedorn and P. Fritz, NMG:June 76: II-773
Risk of Wind Damage to Transmission Line Systems, Alain H. Peyrot and Tarun R. Naik, ST76:Aug 76: 54
Some Aspects of Theory and Applications of Numerical Methods, Chandrakant S. Desai, NMG: June 76:I-58
Stress Cycles for Fatigue Design of Railroad Bridges, Roman Wolchuk and Ronald M. Mayrbaurl, ST1: Jan 76:203:11857
A Structural Design Decision Methodology for Nuclear Power Plants, Samad Zendehrouh and Masanobu Shinozuka, ST76:Aug 76:517
A Structural Design Process, James M. Becker, ST76: Aug 76:341
Structures for Power Stations in Ontario, Canada, Wojciech A. Krajewski, PO2:Nov 76:179:12527
Teaching Structural Analysis and Design Using Computers, Oktay Ural, Preprint No.2737, Sept 76, 8pp.
Ultimate Torque of Reinforced Concrete Beams, David J. Victor, Narayanan Lakshmanan and Narayanan Rajagopalan, ST7:July 76:1337:12249
Weight Optimization of Plane Trusses, Samuel L. Lipson and Krishna M. Agrawal, ST5:May 74:865: 10521

Structural Dynamics

Dynamics of Marine Structures, Joseph P. Murtha, OE75:June 75:914
Review of Selected Topics in Finite Element Analysis, Robert D. Cook, ST76:Aug 76:535
Soil Island Approach to Structure/Media Interaction, Ivan Nelson and Jeremy Isenberg, NMG:June 76:I-41

Structural Engineering

ACI Building Code in Decision Logic Table Format, Jimmy L. Noland and Chuan C. Feng, ST4:Apr 75: 677:11220
Adverse Wind Loading Induced by Adjacent Buildings, Jon A. Peterka and Jack E. Cermak, ST3:Mar 76:533:11980
Ambient Response Analysis of Some Tall Structures, George T. Taoka, Michael Hogan, Fazlur R. Khan and Robert H. Scanlan, ST1:Jan 75:49:11051
Analysis and Design of Griplam Nailed Connections, Ricardo O. Foschi and Jack Longworth, ST12:Dec 75:2537:11766
Analysis of Beam-Columns on Elastic Supports, R. Richard Avent, Dieter Bounin and Hee Chong Rhee, TN: ST3:Mar 76:691:11956
Analysis of Cable-Stiffened Space Structures, Nicholas F. Morris, ST3:Mar 76:501:11998
Analysis of Fatigue of Welded Crane Runway Girders, David A. Demo and John W. Fisher, ST5: May 76:919:12106
Analysis of Interconnected Open Section Shear Wall Structures, Bungale S. Taranath, ST11:Nov 75: 2367:11736
Analysis of Lateral Buckling in Plane Frames, Porpan Vacharajittiphan and Nicholas S. Trahair, ST7:July 75:1497:11430

Analysis of Moderately Thick Shells of Revolution, John E. Goldberg, Yu-Kuang Tang and Divaker V. Pathak, ST4:Apr 75:821:11235
Analysis of Multilayer Plates on Elastic Pillars, Ashok K. Chugh, Hans Gesund and Fred D. Wright, ST11:Nov 75:2405:11738
Analysis of RC Shear Panels under Cyclic Loading, David Darwin and David A. Pecknold, ST2:Feb 76: 355:11896
Analysis of Reinforced Fibrous Concrete Beams, Charles H. Henager and Terrence J. Doherty, ST1: Jan 76:177:11847
Analysis of Sandwich Panels with Formed Faces, John A. Hartsock and Ken P. Chong, ST4:Apr 76: 803:12058
Analysis of Shear Cores Using Superelements, Barry J. Goodno and James M. Gere, ST1:Jan 76:267: 11837
Analysis of Tall Buildings Using Member Groups, David J. Harman and William H. Walker, ST3:Mar 75:567:11173
Applicability of Unit Stream Power Equation, Chih Ted Yang and John B. Stall, HY5:May 76:559: 12103
Approximate Analysis and Economics of Structures, Niels C. Lind, ST6:June 76:1177:12201
Approximate Analysis of Multistory Multibay Frames, Paul C.K. Chan, Arthur C. Heidebrecht and Wai K. Tso, ST5:May 75:1021:11302
Approximate Reanalysis Techniques with Substructuring, Ahmed K. Noor and Harold E. Lowder, ST8:Aug 75:1687:11523
Automated Analysis of Standard Buildings, Norman R. Maham, ST4:Apr 75:751:11265
Avoidance of Parasitic Shear in Plane Element, Robert D. Cook, ST6:June 75:1239:11370
Beam Analog for Plate Elements, M. Ezzat Mohsin and Edward E. Sadek, ST1:Jan 76:125:11844
Bearing Strength of Reinforced Concrete Blocks, Sanat Kumar Niyogi, ST5:May 75:1125:11325
Behavior of Cold-Rolled Stainless Steel Members, Shien T. Wang, Samuel J. Errera and George Winter, ST11:Nov 75:2337:11724
Behavior of Prestressed Cable Truss Structures, Dwight E. Ureliius and David W. Fowler, ST8:Aug 74:1627:10747
Bibliography on Wood and Plywood Diaphragms, J. M. Carney, ST11:Nov 75:2423:11737
The Bicentennial of Structural Engineering, Carl Hirsch, ST76:Aug 76:359
Buckling Formulas for Corrugated Metal Shear Diaphragms, John T. Easley, ST7:July 75:1403: 11429
Buckling of A Single-Crossarm Stayed Column, Raymond J. Smith, George T. McCaffrey and John S. Ellis, ST1:Jan 75:249:11071
Buckling of Composite Beams in Negative Bending, Sumio Hamada and Jack Longworth, ST11:Nov 74: 2205:10917
Buckling of Cooling-Tower Shells: Bifurcation Results, Peter P. Cole, John F. Abel and David P. Billington, ST6:June 75:1205:11365
Buckling of Cooling-Tower Shells: State-of-the-Art, Peter P. Cole, John F. Abel and David P. Billington, ST6:June 75:1185:11364
Buckling of Inelastic I-Beams under Moment Gradient, Sritawat Kitipornchai and Nicholas S. Trahair, ST5:May 75:991:11295
Buckling of Web Plates under Combined Loadings, Mohammed Z. Khan and Kenneth C. Johns, ST10: Oct 75:2079:11619
Buckling of Welded Hybrid Steel I-Beams, David A. Nethercot, ST3:Mar 76:461:11965
Buckling Stress States of Cylindrical Shells, Ihsan Mungan, ST11:Nov 74:2289:10965
Circular Mats under Arbitrary Loading, Ajoy Banerjee and Ziva D. Jankov, ST10:Oct 75:2133: 11637
Coefficients to Analyze Rectangular Slab Bridges, Iman Hossain, ST1:Jan 75:151:11048
Collapse of Curved Reinforced Concrete Beams, Ian J. Jordaan, Magdi M. A. Khalifa and Arthur E. McMullen, ST11:Nov 74:2255:10951
The Color of Structures, Clayford T. Grimm, ST9: Sept 75:1871:11547
Column Design by P Delta Method, Brian R. Wood, Denis Beaulieu and Peter F. Adams, ST2:Feb 76: 411:11936
Column Supported Cylindrical-Conical Tanks, Phillip L. Gould, Subir K. Sen, Robert S.C. Wang, Herman Suryoutomo and Richard D. Lowrey, ST2:Feb 76: 429:11927
Commentary on Orthotropic-Deck Bridge Specifications, Charles G. Schilling, Chmn., ST1:Jan 74:109:10273
Composite Steel-Concrete Construction, Ivan M. Viest, Chmn., ST5:May 74:1085:10561
Composite Steel-Deck Concrete Floor Systems, Reinhold M. Schuster, ST5:May 76:899:12116
Computer Analysis of Segmentally Erected Bridges, Robert C. Brown, Jr. and Ned H. Burns, ST4:Apr 75:761:11218
Computer Analysis of Steel Frame in Fire, Wun-Chau Cheng and Cary K. Mak, ST4:Apr 75:854: 11262
Computer-Based Technology Transfer, Roberta H. Ewald, Charles H. Goodspeed, Richard A. Jones, Robert R. Smith, Daniel R. Rehak, John G. Voreades and Ben Y.C. Wong, EI2:Apr 75:175: 11228
Computing Education through Program Evaluation, John Y. Campbell, EI2:Apr 75:149:11240
Concrete Bearing Strength—Support, Mix, Size Effect, Sanat Kumar Niyogi, ST8:Aug 74:1685: 10765
Concrete Encased Steel Columns—Design Tables, Richard W. Furlong, ST9:Sept 74:1865:10807
Concrete L-Beams Subject to Combined Torsional Loads, D. Wayne Kirk and David G. McIntosh, ST1:Jan 75:269:11064
Concrete Material Response by Acoustic Spectra Analysis, Demeter G. Fertis, ST2:Feb 76:387:11943
Concrete Pipe Culvert Behavior - Part 2, Raymond Eugene Davis and Alfred E. Bacher, ST3:Mar 74: 615:10408
Concrete Pipe Culvert Behavior—Part 1, Raymond Eugene Davis, Alfred E. Bacher and John C. Obermuller, ST3:Mar 74:599:10404
Conditioning of Structural Flexibility Matrix, Charles H. Goodspeed and Michael J. Martin, ST8:Aug 74: 1677:10763
Continuous Plate Analysis by Finite Panel Method, Richard M. Gutkowski and Chu-Kia Wang, ST3: Mar 76:629:12002
Continuum Method for Overall Stability of Tall Asymmetric Buildings, Ari Danay, Menachem Gellert and Jacob Gluck, ST12:Dec 75:2505:11761
Coupled Shear Wall Analysis by Lagrange Multipliers, Riadh S. Al-Mahaidi and Arthur H. Nilson, ST11:Nov 75:2359:11732
Cracking Analysis of Reinforced Concrete Plates, Maharaj K Wanchoo and Gerald W. May, ST1:Jan 75:201:11059
Creep and Shrinkage in Reactor Containment Shells, Zdenek P. Bazant, Domingo J. Carreira and Adolf Walser, ST10:Oct 75:2117:11632
Curvilinearly Corrugated Plates in Shear, Lung-Hsiang Wu and Charles Libove, ST11:Nov 75:2205: 11714
Design Criteria for H-Columns under Biaxial Loading, Negussie Tebedge and Wai F. Chen, ST3: Mar 74:579:10400
Design for Differential Movement in Brick Walls, Clayford T. Grimm, ST11:Nov 75:2385:11739
Design of Diaphragm-Braced I-Beams, David A. Nethercot and Nicholas S. Trahair, ST10:Oct 75: 2045:11615
Design of I-Shaped Beams with Diaphragm Bracing, Samuel J. Errera and Tamirisa V.S.R. Apparao, ST4:Apr 76:769:12051
Design of Large Papermachine Mat Foundation, Anton W. Wegmuller, James H. Woodward and John R. Bayliss, ST1:Jan 76:231:11863
Design of Reinforced Concrete Spandrel Beams, Thomas T.C. Hsu and Kenneth T. Burton, ST1:Jan 74:209:10277

Design of Steel Transmission Pole Structures, Gene M. Wilhoite, Chmn., ST12:Dec 74:2449:11009
Diaphragm Braced Members and Design of Wall Studs, Amir Simaan and Teoman B. Pekoz, ST1:Jan 76:77:11851
Diaphragms for Curved Box Beam Bridges, James C. Oleinik and Conrad P. Heins, ST10:Oct 75:2161:11634
A Direct Solution of Continuous Beams, Chang-Ning Sun, CE:Sept 76:97
Displacements and Losses in Multistage Prestressed Members, Amin Ghali, Romy G. Sisodiya and Gamil S. Tadros, ST11:Nov 74:2307:10968
Ductile Behavior of Coupled Shear Walls, Thomas Paulay and Arumbakkam R. Santhakumar, ST1:Jan 76:93:11852
Durability of Concrete in Seawater, Povindar K. Mehta and Harvey H. Haynes, ST8:Aug 75:1679:11516
Dynamic Analysis of Curved Box-Girder Bridges, Rahmat Ollah Rabizadeh and Sidney Shore, ST9:Sept 75:1899:11561
Dynamic Properties of Tall Shear-Wall Buildings, George T. Taoka, Augustine S. Furumoto and Arthur N.L. Chiu, ST2:Feb 74:305:10336
Dynamic Tornadic Wind Loads on Tall Buildings, Yi-Kwei Wen, ST1:Jan 75:169:11045
Earthquake Behavior of Suspended-Floor Buildings, Barry J. Goodno and James M. Gere, ST5:May 76:973:12105
Earthquake Design of Buildings:Damping, Gary C. Hart and Ramaswami Vasudevan, ST1:Jan 75:11:11041
Earthquake Resistant Design of Intake-Outlet Towers, Anil K. Chopra and C-Y. Liaw, ST7:July 75:1349:11422
Effects of Elevated Temperature on Structural Members, Tasnim Uddin and Charles G. Culver, ST7:July 75:1531:11440
Effects of Foundation Tipping on Dynamic Response, Jethro W. Meek, ST7:July 75:1297:11411
Effects of Turbulence on Bridge Model Torsional Stability, Timothy A. Reinhold, Henry W. Tieleman and Francis J. Maher, ST5:May 76:1003:12118
Efficient Design-Analysis of Physically Nonlinear Trusses, Edwin C. Rossow, David L.C. Lo and Shih-Lung Chu, ST4:Apr 75:839:11257
Elastic Behavior of Tapered Monosymmetric I-Beams, Sritawat Kitipornchai and Nicholas S. Trahair, ST8:Aug 75:1661:11479
Elastic Buckling of Arches under Symmetrical Loading, Walter J. Austin and Timothy J. Ross, ST5:May 76:1085:12149
Elastic Stability of Polygon Folded Plate Columns, R. Richard Avent and James H. Robinson, Jr., ST5:May 76:1015:12108
Epoxy-Repaired Bolted Timber Connections, R. Richard Avent, Leroy Z. Emkin, Robert H. Howard and Charles L. Chapman, ST4:Apr 76:821:12061
The Equivalent Length of a Pile or Caisson in Soil, Peter Kocsis, CE:Dec 76:63
Equivalent Static Wind Loads for Tall Building Design, Emil Simiu, ST4:Apr 76:719:12057
Estimating Damping of Real Structures, Jon D. Raggett, ST9:Sept 75:1823:11554
Examples of Computer Usage in Bridge Design, Robert J. Cope and John H. Bungey, ST4:Apr 75:779:11230
Experience with Computer-Aided Drafting System, Geoffrey M.J. Williams, ST4:Apr 75:649:11224
Failure Hypothesis for Masonry Shear Walls, Felix Y. Yokel and S. George Fattal, ST3:Mar 76:515:11992
Fatigue Life Extension of Riveted Connections, Harold S. Reemsnyder, ST12:Dec 75:2591:11795
Fazlur Khan: A Look to the Sky, CE:July 76:69
Ferrocement—Behavior in Tension and Compression, Colin D. Johnston and Samir G. Mattar, ST5:May 76:875:12104
Ferrocement—Material Behavior in Flexure, Colin D. Johnston and Dallas N. Mowat, ST10:Oct 74:2053:10878
Field Problems of Latticed Structures, Lev Zetlin, Joseph F. Thelen and Daniel A. Cuoco, ST11:Nov 75:2241:11711
FILES: Automated Engineering Data Management System, Leonard A. Lopez, ST4:Apr 75:661:11241
Finite Element Analysis of Layered Wood Systems, Erik G. Thompson, James R. Goodman and M. Daniel Vanderbilt, ST12:Dec 75:2659:11802
Finite Element Analysis of Wood-Stud Walls, Anton Polensek, ST7:July 76:1317:12234
Flexural-Torsional Buckling of Curved Members, Porpan Vacharajittiphan and Nicholas S. Trahair, ST6:June 75:1223:11350
Fracture and Stress-Strain Relationship of Concrete Under Triaxial Compression, Ranga Palaniswamy and Surendra P. Shah, ST5:May 74:901:10547
Fracture Sensitivity of Dynamically Loaded Girders, Donald S. Mansell and Peter Dobos, ST12:Dec 75:2523:11754
Frame Collapse Using Tangent Stiffness, William Tranberg, Peter Swannell and John L. Meek, ST3:Mar 76:659:11979
Frame Interaction in Nonorthogonal Grids, Stephen Chriss, ST4:Apr 76:739:12031
Frame Optimization Including Frequency Constraints, J. Shamie and Lucien A. Schmit, Jr., ST1:Jan 75:283:11075
Free-Form Arch Dam Design System, Walter Stensch and G. Gerry, ST4:Apr 75:795:11222
Free Vibration Analysis Using Substructuring, Gordon H. Holze and Arthur P. Boresi, ST12:Dec 75:2627:11788
Full Range Analysis of Eccentrically Stiffened Plates, Anton W. Wegmuller, ST1:Jan 74:143:10286
Full-Scale Tests on Tapered and Curved Glulam Beams, Vijaya K.A. Gopu and James R. Goodman, ST12:Dec 75:2609:11794
Further Aspects of Design by PΔ Model, Brian R. Wood, Denis Beaulieu and Peter F. Adams, ST3:Mar 76:487:11973
Gradient Methods in Optimum Structural Design, Emil O. Frind and Peter M. Wright, ST4:Apr 75:937:11236
Guidance for Load Tests of Buildings, Neal FitzSimons and Anatole Longinow, ST7:July 75:1367:11431
Gust Factors for Hyperbolic Cooling Towers, Mahendra P. Singh and Ajaya K. Gupta, ST2:Feb 76:371:11894
Helicoidal Girders, Himat T. Solanki, TN: ST4:Apr 76:869:12076
High-Strength Bolted Connections Subject to Prying, Henning Agerskov, ST1:Jan 76:161:11840
Illustrations of Reliability-Based Design, Mayasandra K. Ravindra, Niels C. Lind and Wilfred W.C. Siu, ST9:Sept 74:1789:10779
Impact of CDC STAR-100 Computer on Finite Element Systems, Ahmed K. Noor and Robert E. Fulton, ST4:Apr 75:731:11216
Improved Two-Dimensional Finite Element, Robert D. Cook, ST9:Sept 74:1851:10808
Inductive Approaches to Structural Safety, Daniele Veneziano, EI1:Jan 76:81:11871
Inelastic Analysis of Reinforced Concrete Frames, Leone Corradi, Osvaldo De Donato and Giulio Maier, ST9:Sept 74:1925:10832
Inelastic Behavior of Wood Beam-Columns, Borislav D. Zakic, ST2:Feb 75:417:11145
Inelastic Buckling of Simply Supported Steel I-Beams, Sritawat Kitipornchai and Nicholas S. Trahair, ST7:July 75:1333:11419
Inelastic Lateral Buckling of Determinate Beams, David A. Nethercot and Nicholas S. Trahair, ST4:Apr 76:701:12020
Inelastic Spatial Stability of Restrained Beam-Columns, Sriramulu Vinnakota and Pentti Aysto, ST11:Nov 74:2235:10919
Inelastic Strength of Cold-Formed Steel Beams, H. Peter Reck, ST11:Nov 75:2193:11713
Inelastic Sway Buckling of Multistory Frames, Francois Cheong-Siat-Moy, ST1:Jan 76:65:11848
Information Models in Building Design Process, Alan D. Russell, EI2:Apr 75:133:11217

An Integrated Approach to Structural Engineering Education at the Undergraduate Level, Richard N. White, ST76:Aug 76:1001
Integrated System for Production of Joists, A. Murray Lount and Sidney H. Simmonds, ST4:Apr 75:807:11242
Integration of Linear Equations of Motion, Robert J. Melosh, ST7:July 75:1551:11444
Interactive Nonlinear Structural Analysis, Howard B. Harrison, ST7:July 76:1353:12235
Interlock Tension in Steel Sheet Piling, J. Neil Kay, ST10:Oct 75:2093:11638
Irregular Supports and Skew Diaphragms of Box Girders, Vladimir Kristek, ST5:May 74:917:10541
Iterative Design for Optimal Geometry, William R. Spillers, ST7:July 75:1435:11439
Laminated Timber Logging Bridges in British Columbia, Richard G. Scarisbrick, ST1:Jan 76:19:11832
Lateral Stability of Plane Open-Web Structures, P. C. Varghese, ST11:Nov 74:2223:10924
Light-Gage Steel Bolted Connections without Washers, Ken P. Chong and Robert B. Matlock, ST7:July 75:1381:11433
Limit States Basis for Cold-Formed Steel Design, Sree R. Parimi and Niels C. Lind, ST3:Mar 76:475:12009
Linear Structural Analysis of Multistory Buildings, R. Shankaran Nair, ST3:Mar 75:551:11163
Liner Anchorage Analysis for Nuclear Containments, Ted L. Winstead, Edwin G. Burdette and Daryl R. Armentrout, ST10:Oct 75:2103:11635
Liner Anchorage Tests, Edwin G. Burdette and Larry W. Rogers, ST7:July 75:1455:11432
Literature Surveys of Cold-Formed Structures, Ken P. Chong, Chmn., Preprint No.2807, Sept 76, 59pp.
Load Factor Analysis of Design of Bridges, James C. Porter, ST5:May 76:891:12098
Load Factor Design of Continuous-Span Bridges, Conrad P. Heins and Alan D. Kurzweil, ST6:June 76:1213:12219
Load Tests of Building Structures, Richard Bares and Neal FitzSimons, ST5:May 75:1111:11322
Local and Overall Buckling of Cold-Formed Members, John T. DeWolf, Teoman B. Pekoz and George Winter, ST10:Oct 74:2017:10875
Local Buckling of Long-Span Concrete Folded Plates, Stuart E. Swartz and Vernon H. Rosebraugh, ST10:Oct 76:1981:12455
Local Buckling of Long-Span Folded Plates, Stuart E. Swartz, Vernon H. Rosebraugh and Guang-Nan Fanjiang, ST5:May 75:1097:11298
Low-Temperature Tests of Simulated Bridge Members, Charles G. Schilling, Karl H. Klippstein, John M. Barsom, Stephan R. Novak and Gilbert T. Blake, ST1:Jan 75:31:11049
Lumped Parameter Circular Plate Stability Analysis, George Johnson and Walter Pilkey, TN: ST5:May 76:1135:12128
Matrix Analysis of Structure-Foundation Interaction, Fukashi Miyahara and John G. Ergatoudis, ST1:Jan 76:251:11836
Metal Ties and Anchors for Brick Walls, Clayford T. Grimm, ST4:Apr 76:839:12067
Method of Developing Optimum Tolerances, Emilio Rosenblueth and Alejandro Asfura, ST2:Feb 76:323:11889
Minimum Cost Selection of One-Way Slab Thickness, Russell H. Brown, ST12:Dec 75:2585:11785
Minimum Weights for Circular Tube Cantilever Beams, Howard I. Epstein and Jasim M. Alsaigh, TN: ST1:Jan 76:318:11821
Missile Penetration, Chang-ning Sun, Edwin G. Burdette and Robert O. Barnett, TN: ST5:May 76:1141:12128
Modal Analysis of Cable Networks, Nicholas F. Morris, ST1:Jan 75:97:11055
Model Study of Horizontally Curved Box Girder, Adel R.M. Fam and Carl J. Turkstra, ST5:May 76:1097:12151
Multilevel Approach to Optimum Structural Design, Uri Kirsch, ST4:Apr 75:955:11259
Multistage Optimization of Structures, Lawrence A. Twisdale and Narbey Khachaturian, ST5:May 75:1005:11297
Multistory Frame Design Using Story Stiffness Concept, Francois Cheong Siat Moy, ST6:June 76:1197:12221
Natural Vibrations of Suspension Cables, Harry H. West, Louis F. Geschwindner and Joseph E. Suhoski, ST11:Nov 75:2277:11712
New Concepts-Byproducts of Computer Technology, Fazlur R. Khan, ST4:Apr 75:627:11243
Node Numbering Optimization in Structural Analysis, Joaquim S.N. Rodrigues, ST2:Feb 75:361:11117
Nonlinear Analysis of RC Shells of General Form, Cheng-Shung Lin and Alexander C. Scordelis, ST3:Mar 75:523:11164
Nonlinear Analysis of Reticulated Space Trusses, Dharapuram S. Jagannathan, Howard I. Epstein and Paul P. Christiano, ST12:Dec 75:2641:11799
Nonlinear Cable and Frame Interaction, Kuang-Han Chu and David Chia-Chiun Ma, ST3:Mar 76:569:12008
Nonlinear Optimum Design of Dynamic Damped Frames, Franklin Y. Cheng and Mark E. Botkin, ST3:Mar 76:609:11993
O.H. Ammann: A View from the Bridge, CE:July 76:77
Open Steel Box Sections with Top Lateral Bracing, Robert E. McDonald, Yeou-San Chen, Cetin Yilmaz and Ben T. Yen, ST1:Jan 76:35:11850
Optimal Design of Plane Frames, Jasbir S. Arora, Edward J. Haug, Jr. and Kwan Rim, ST10:Oct 75:2063:11633
Optimization in Trusses Using Optimal Control Theory, Narasingam M. Singaraj and Jawalker K. Sridhar Rao, ST5:May 75:1037:11304
Optimization of Long-Span Cold-Formed Truss Purlins, Richard T. Douty and James O. Crooker, ST11:Nov 74:2275:10952
Optimization of Unstiffened Hybrid Beams, Ken P. Chong, ST2:Feb 76:401:11907
Optimum Seismic Design of Linear Shear Buildings, Emilio Rosenblueth and Alejandro Asfura, ST5:May 76:1077:12119
Organizational Model for Design Specifications, Douglas J. Nyman and Steven J. Fenves, ST4:Apr 75:697:11227
Overall Elastic Stability of Multistory Buildings, R. Shankaran Nair, ST12:Dec 75:2487:11762
Physical Properties of Premixed Polymer Concrete, Tse-Yung P. Chang and Howard L. Stephens, ST11:Nov 75:2293:11704
Pipeline Bridge Uses Timber Arches, Charles Gary Peterson, CE:Feb 75:58
Plastic Collapse of Folded Plate Structures, Morris N. Fialkow, ST7:July 75:1559:11465
Plastic Design of Web Openings in Steel Beams, Marvin A. Larson and Kirit N. Shah, ST5:May 76:1031:12155
Plastic Rotations in Continuous Encased Beams, Subhash Chandra Maiti, ST6:June 75:1269:11375
Polymer-Impregnated Concrete: Laboratory Studies, Einar Dahl-Jorgensen, Wai F. Chen, John A. Manson, Yu-Nan Liu and John W. Vanderhoff, TE1:Feb 75:29:11101
Post-Buckling of Redundant Rectangular Beams, Scott T. Woolcock and Nicholas S. Trahair, EM4:Aug 75:301:11491
Post-Crushing Behavior of Unbound Concrete Beams, Mohammad Iqbal and David S. Hatcher, ST11:Nov 75:2303:11719
Post-Local-Buckling Behavior of Continuous Beams, Shien T. Wang and Sheng S. Yeh, ST6:June 74:1169:10595
Post-Tensioned Slab Bridges on Isolated Supports, Roger Green, ST1:Jan 75:233:11065
Practical Applications of Structural Optimization, George G. Goble and Fred Moses, ST4:Apr 75:635:11267
Practical Approach to Code Calibration, Wilfred W.C. Siu, Sree R. Parimi and Niels C. Lind, ST7:July 75:1469:11404

Preliminary Plastic Design of Tall Steel Frames, M. Bassam El Hafez and Graham H. Powell, ST9:Sept 74:1837:10796
Prestressed Box Beams under Combined Loading, David W. Johnston and Paul Zia, ST7:July 75:1313:11421
Prestressed Composite Continuous Bridge Girder, Subhash C. Anand and Clarence J. Fennell, III, TN: ST1:Jan 76:313:11821
Principles of Composition in Building Art, Clayford T. Grimm, ST9:Sept 75:1739:11544
Probability of Failure of Building from Fire, Raymond H. Burros, ST9:Sept 75:1947:11567
Providing the Profession with Design Programs, Eddie Y.L. Chien and Michael I. Gilmor, EI2:Apr 75:165:11261
Punching Shear Strength of Restrained Slabs, Brian E. Hewitt and Barrington deV. Batchelor, ST9:Sept 75:1837:11548
Rainwater Ponding on Beam-Girder Roof Systems, R. Richard Avent and William G. Stewart, ST9: Sept 75:1913:11564
Rationalized Esthetics in Civil Engineering, Clayford T. Grimm, ST9:Sept 75:1813:11546
Reinforced Concrete Corners and Joints Subjected to Bending Moment, Ingvar H.E. Nilsson and Anders Losberg, ST6:June 76:1229:12222
Reinforced Concrete Hyperbolic Paraboloid Shells, Richard N. White, ST9:Sept 75:1961:11595
Reliability Theory of Deteriorating Structures, Hiroyuki Kameda and Takeshi Koike, ST1:Jan 75: 295:11079
Response Analysis of Tall Buildings to Wind Loadings, Rimas Vaicaitis, Masanobu Shinozuka and Masaru Takeno, ST3:Mar 75:585:11194
Response of a Column in Random Vibration Tests, Gene K. Baxter and Ross M. Evan-Iwanowski, ST9:Sept 75:1749:11568
Response of Structures to Random Wind Forces, Michael J. O'Rourke, Richard A. Parmelee and Ross B. Corotis, ST12:Dec 75:2557:11786
Seismic and Cyclonic Response of Continuous Frames, Gerald M. Smith, George C. Ernst and Mahendra Maheshwari, ST2:Feb 74:391:10355
Seismic Behavior of K-Braced Framing Systems, James C. Anderson, ST10:Oct 75:2147:11636
Seismic Design Decision Analysis, Robert V. Whitman, John M. Biggs, C. Allin Cornell, John E. Brennan, III, Richard L. de Neufville and Erik H. Vanmarcke, ST5:May 75:1067:11309
Seismic Interaction of Structures on Hysteretic Foundations, Anestis S. Veletsos and V. V. Damodaran Nair, ST1:Jan 75:109:11046
Seismic Risk Analysis of Boston, C. Allin Cornell and Hans A. Merz, ST10:Oct 75:2027:11617
Shakedown of Beams on Flexible Supports, Dale G. Eyre and Theodore V. Galambos, ST5:May 76:935: 12101
Shear Behavior of Steel Frame Joints, Helmut Krawinkler, Vitelmo V. Bertero and Egor P. Popov, ST11:Nov 75:2317:11717
Shear-Bond Analysis of Steel-Deck-Reinforced Slabs, Max L. Porter, Carl E. Ekberg, Jr., Lowell F. Greimann and Hotten A. Elleby, ST12:Dec 76: 2255:12611
Shear Stresses in Beams with Discontinuity in Depth, John Marshall and Ravindra P. Jategaonkar, ST7: July 75:1393:11424
Short Duration Analytic Earthquake, Gordon R. Johnson and Howard I. Epstein, ST5:May 76:993: 12109
Simplified Analysis of Framed-Tube Structures, Alexander Coull and Bishwanath Bose, ST11:Nov 75:2223:11696
Simplified Analysis of Wall-Frame Building Structures, Carlos A. Prato, TN: ST12:Dec 76: 2353:12593
Simulated Earthquake Tests of R/C Frames, Shunsuke Otani and Mete A. Sozen, ST3:Mar 74: 687:10435
Single Element Panel for Flat Plate Structures, Sid French, Algis P. Kabaila and Victor A. Pulmano, ST9:Sept 75:1801:11553
Skew and Elevated Support Effects on Curved Bridges, Donald W. Funkhouser and Conrad P. Heins, ST7:July 74:1379:10670
Some Esthetic Considerations in Steel Design, Thomas C. Kavanagh, ST11:Nov 75:2257:11718
Special Problems Related to Linear Equation Solvers, Christian Meyer, ST4:Apr 75:867:11223
Stability of Half-Barrel Orthotropic Shells, Osman A. Marzouk and George Abdel-Sayed, ST7:July 75: 1517:11441
Stability of Hyperboloidal Shells, Daniel R. Veronda and Victor I. Weingarten, ST7:July 75:1585:11446
The State-of-the-Art of Computer Graphics Applications in Structural Engineering, Robert D. Logcher, Chmn., ST3:Mar 75:459:11158
State-of-the-Art Report on Ultimate Strength of I-Beam Bridge Systems, Conrad P. Heins, Chmn., ST5:May 75:1085:11323
Steel Box-Girder Bridges—Ultimate Strength Considerations, Charles G. Culver, Chmn., ST12: Dec 74:2433:11014
Steel Orthotropic Plates under Alternate Loads, Giulio Ceradini, Carlo Gavarini and Mario P. Petrangeli, ST10:Oct 75:2015:11618
Strain Hardening and Aging in Cold-Formed Steel, Kenneth W. Karren and Mahendrasinhji M. Gohil, ST1:Jan 75:187:11067
Strength and Related Properties of Brick Masonry, Clayford T. Grimm, ST1:Jan 75:217:11066
Strength Decay of RC Columns under Shear Reversals, James K. Wight and Mete A. Sozen, ST5:May 75:1053:11311
Strength of Beams with Eccentric Reinforced Holes, Tsong-Miin Wang, Robert R. Snell and Peter B. Cooper, ST9:Sept 75:1783:11540
Strength of Steel Box-Girder Bridges, Patrick J. Dowling, ST9:Sept 75:1929:11550
Stress Cycles for Fatigue Design of Railroad Bridges, Roman Wolchuk and Ronald M. Mayrbaurl, ST1: Jan 76:203:11857
Structural Characteristics of Weathered Plywood, Michael O. Hunt and DeForest A. Matteson, Jr., ST4:Apr 76:759:12050
Structural Fire Resistance of Concrete, Eduardo Salse and Tung D. Lin, ST1:Jan 76:51:11835
Structural Optimization by Equilibrium Linear Programming, Kenneth F. Reinschmidt and Thanet Norabhoompipat, ST4:Apr 75:919:11219
Study of Three-Flight Free-Standing Staircases, Simon F. Ng and Alvar T. Chetty, ST7:July 75: 1419:11434
Subassemblage Concept for Tall Frame Analysis, Graham H. Powell and M. Bassam El Hafez, ST8: Aug 74:1611:10739
Substitute-Structure Method for Seismic Design in R/C, Akenori Shibata and Mete A. Sozen, ST1:Jan 76:1:11824
Survey of Structural Reanalysis Techniques, Jasbir S. Arora, ST4:Apr 76:783:12056
Systematic Substructuring, Senol Utku, ST4:Apr 75: 717:11244
Tall Buildings under Five-Component Earthquakes, Emilio Rosenblueth, TN: ST2:Feb 76:455:11886
Technique for Formulating Beam Equations, David W. Murray, EM5:Oct 75:561:11613
Tendon Control in Tall Structures, John Roorda, ST3:Mar 75:505:11168
Tension Proof Loading for Southern Pine Beams, M. Dee Strickler and Roy F. Pellerin, ST3:Mar 76:645: 11978
Tests of Welded Steel Beam-to-Column Moment Connections, John Parfitt, Jr. and Wai F. Chen, ST1:Jan 76:189:11854
Tests on Slab-Column Connections with Shear and Unbalanced Flexure, Shafiqul Islam and Robert Park, ST3:Mar 76:549:11972
Theory for Concrete Beams in Torsion and Bending, Kevin D. Below, B. Vijaya Rangan and A. Stanley Hall, ST8:Aug 75:1645:11480
Thermal Calculations for Bridge Design, Bruce W. Hunt and Nigel Cooke, ST9:Sept 75:1763:11545
Thermal Loading of Thin-Shell Concrete Cooling Towers, Richard D Larrabee, David P. Billington and John F. Abel, ST12:Dec 74:2367:11002

Three-Dimensional Analysis of Shear Wall Buildings to Lateral Load, Jayanta K. Biswas and Wai K. Tso, ST5:May 74:1019:10537
Tornado Design Winds Based on Risk, Robert C. Garson, Jose Morla Catalan and C. Allin Cornell, ST9:Sept 75:1883:11559
Torsional Analysis of Perforated Core Structure, Avigdor V. Rutenberg and Wai K. Tso, ST3:Mar 75:539:11167
Torsional Response of High-Rise Buildings, Gary C. Hart, Roger M. DiJulio, Jr. and Marshall Lew, ST2: Feb 75:397:11126
Torsional Strength of Prestressed Concrete Beams, H. Roger Woodhead and Arthur E. McMullen, ST5: May 74:881:10545
Torsion of Frame-Tube Structures, Alexander Coull and Bishwanath Bose, TN: ST12:Dec 76:2366: 12593
Towards Optimum Design Through Building Codes, Emilio Rosenblueth, ST3:Mar 76:591:11999
Trapezoidally Corrugated Plates in Shear, M. Iqbal Hussain and Charles Libove, ST5:May 76:1109: 12159
TWA Hangars of Thin Shell Design, Roney A. Heinz, CE:Jan 75:55
Ultimate Instability of Earthquake Structures, Franklin Y. Cheng and Kenneth B. Oster, ST5:May 76:961:12117
Ultimate Live Load Distribution Factor for Bridges, Conrad P. Heins and John T.C. Kuo, ST7:July 75: 1481:11443
Ultimate Strength Study of Two-Way Concrete Slabs, Michael S. Black, ST1:Jan 75:311:11077
Use of Computers in Transmission Tower Design, David L.C. Lo, Andrew Morcos and Surendra K. Goel, ST7:July 75:1443:11410
Use of Finite Element Analyses for Railcar Design, Michael J. Dennis, TE1:Feb 76:105:11921
Utilization of Cold Work in Cold-Formed Steel, Niels C. Lind and Dilip K. Schroff, ST1:Jan 75:67:11043
Variable Energy Ratio Method for Structural Design, James W. Gorzynski and William A. Thornton, ST4:Apr 75:973:11266
A Viewpoint for the Traditional Approach to Structural Engineering Education, Donald R. Sherman, 1976
Wall-Beam Frames under Static Lateral Load, Allen L. Mee, Ian J. Jordaan and Michael A. Ward, ST2: Feb 75:377:11121
Warping and Distortion at I-Section Joints, Porpan Vacharajittiphan and Nicholas S. Trahair, ST3:Mar 74:547:10390
Weight Optimization of Plane Trusses, Samuel L. Lipson and Krishna M. Agrawal, ST5:May 74:865: 10521
Window Glass Failures in Windstorms, Joseph E. Minor and W. Lynn Beason, ST1:Jan 76:147:11834
Wind Pressures on Buildings-Probability Densities, Jon A. Peterka and Jack E. Cermak, ST6:June 75: 1255:11373
Wood Shear Panels Bonded with Flexible Adhesives, John A. Richards, Robert P. Kerfoot and Gordon P. Krueger, ST1:Jan 75:131:11056
Yield Criterion for Reinforced Concrete Slabs, Satish C. Jain and John B. Kennedy, ST3:Mar 74:631: 10409
Yield-Line Design of Slabs, Sidney H. Simmonds and Amin Ghali, ST1:Jan 76:109:11853

Structural Forms

New Concepts-Byproducts of Computer Technology, Fazlur R. Khan, ST4:Apr 75:627:11243

Structural Members

Curvilinearly Corrugated Plates in Shear, Lung-Hsiang Wu and Charles Libove, ST11:Nov 75:2205: 11714
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, EM6:Dec 76:1041: 12640
Rigid-Plastic Circular Plates on Elastic Foundation, Dusan Krajcinovic, EM2:Apr 76:213:12046
Trapezoidally Corrugated Plates in Shear, M. Iqbal Hussain and Charles Libove, ST5:May 76:1109: 12159

Structural Models

Nuclear Turbine-Generator Foundation Model Tests, Ish K. Aneja and Brian W. Dimmick, Preprint No.2704, Apr 76, 30pp.

Structural Stability

Diffusion of Probability Mass and First Passage Probability, Jann-Nan Yang, EM5:Oct 75:639: 11654
Structural System Failure Analysis in a High Load Environment, Jon D. Collins, ST76:Aug 76:39

Structural Steel

AISC Code Compliance Provisions of ICES STRUDL-II, Michael G. Samuchin, ST76:Aug 76: 756
Historical Review of Earthquakes, Damage, and Building Codes, Glen V. Berg, ST76:Aug 76:387
Kansas City Bank Tower Features Water-Filled Columns, Exposed Spandrels, CE:Jan 76:58
Limit States Basis for Cold-Formed Steel Design, Sree R. Parimi and Niels C. Lind, ST3:Mar 76:475: 12009
Past 50-Year Development of Constructional Steels, Ralph D. Webb, John A. Gilligan and Roland M. Brown, CO4:Dec 75:785:11753
The Safety of Structural Steel Columns, Reidar Bjorhovde, Preprint No.2809, Sept 76, 27pp.

Structural Steels

Design Concepts for Structural Steel Dolphins, Casimir J. Kray, ST76:Aug 76:661

Structures

Aspects of Dynamic Stability of Structures, Horst H.E. Leipholz, EM2:Apr 75:109:11229
Cantilever Cylindrical Shells Under Assumed Wind Pressures, S. Gopalacharyulu and David J. Johns, EM5:Oct 73:943:10085
"Construction and Design of Cable-Stayed Bridges," by Walter Podolny, Jr. and John B. Scalzi (Book Review), Charles Seim, CE:Oct 76:34
Highlights of San Diego Convention, CE:June 76:67
Optimal Design of Plane Frames, Jasbir S. Arora, Edward J. Haug, Jr. and Kwan Rim, ST10:Oct 75: 2063:11633
Progressive Collapse Discussed in Texas, CE:Feb 76: 20
Response of Structures to Random Wind Forces, Michael J. O'Rourke, Richard A. Parmelee and Ross B. Corotis, ST12:Dec 75:2557:11786
Short Duration Analytic Earthquake, Gordon R. Johnson and Howard I. Epstein, ST5:May 76:993: 12109

Struts

Buckling of A Single-Crossarm Stayed Column, Raymond J. Smith, George T. McCaffrey and John S. Ellis, ST1:Jan 75:249:11071
Deformation of Deep Excavations, Dieter Stroh and Herbert Breth, NMG:June 76:II-686
Finite Element Analysis of Stresses and Movements in Excavations, Hiromitsu Izumi, Katsumi Kamemura and Seiichi Sato, NMG:June 76:II-701
Model of Interactive Buckling of Stiffened Plates, James G.A. Croll, EM5:Oct 75:575:11622

Students

College Admissions for Engineering and Technology, Donald G. Dickason, CE:Feb 76:60
Inequities in Minority Engineer Education, Oswald Rendon-Herrero, EI4:Oct 75:499:11666
Learn From Biographies of Early Engineers, Philip L. Alger, CE:Mar 75:90
New Building Measures Needed in Order to Design for People, Calvin W. Taylor, EFAN:Dec 74:47

Recruiting, Scholarship and Work Programs Involving Women and Minority Engineering Students at New Mexico State University, John W. Hernandez and Roger M. Zimmerman, Preprint No.2796, Sept 76, 10pp.
University of Wisconsin: A Success Story in Continuing Engineering Education, CE:Sept 75:101
Why A Co-op Program—A Student's Point of View, Douglas J. Marshall, EI2:Apr 75:243:11264

Studs
Finite Element Analysis of Wood-Stud Walls, Anton Polensek, ST7:July 76:1317:12234

Studs (Structural Members)
Diaphragm Braced Members and Design of Wall Studs, Amir Simaan and Teoman B. Pekoz, ST1:Jan 76:77:11851
Fatigue and Fracture of Bridge Steels, Richard Roberts and George R. Irwin, ST2:Feb 76:337:11913

Subarctic
Basic Construction Principles in Higher Latitudes, Shu-T'ien Li, CO1:Mar 74:33:10399

Subassemblies
Linear Structural Analysis of Multistory Buildings, R. Shankaran Nair, ST3:Mar 75:551:11163

Subdivisions
Earthwork Volumes by Contour Method, Francis E. Smith, CO1:Mar 76:131:11977
Kingwood: A Non-Assisted Private Suburban Development, Daniel B. Stauffer, Preprint No.2656, Apr 76, 26pp.
Method for Delineating Districts of Varying Shape, Geoffrey N. Berlin, TE4:Nov 76:805:12537

Subgrade
Finite Element Analysis of Pile-Supported Pavement Structures, Raman Pichumani, John E. Crawford and George E. Triandafilidis, TE2:May 74:293:10516

Subgrades
Distribution of Subgrade Reaction Using Substructuring Finite Element Methods, Satyananda Chakrabarti, Nishikant R. Vaidya and Donald E. Shaw, NMG:June 76:I-551
Fly Ash Pavements, Run Ways to Take Off?, Virginia Fairweather and Marvin L. Byington, CE:Aug 75:57
Numerical Analysis of Rigid Pavement Resting over Hookean Subgrade Continuum, Madan G. Arora and Sudarshan K. Khanna, NMG:June 76:I-511

Submarine Topography
Compressibility of Undisturbed Submarine Sediments, William F. Brumund and Gordon W. Callender, Jr., OE75:June 75:363

Submerged Orifices
Wastewater Disposal by Submerged Manifolds, Paul Liseth, HY1:Jan 76:1:11839

Submergence
Vortex Suppression in Stilling Pond Overflow, Y. R. Reddy and John Pickford, HY11:Nov 74:1685:10969

Subsidence
Effect of Drainage on the Subsidence of Organic Soil, Ross W. Irwin, IR76:July 76:211
Pumping of Aquifer with Viscoelastic Properties, Wilfried Brutsaert and M. Yavuz Corapcioglu, HY11:Nov 76:1663:12541
Some Geotechnical Aspects of Marginal Wharf Design, William Enkeboll and Vernon A. Smoots, Preprint No.2699, Apr 76, 24pp.
Subsidence Over Soft Ground Tunnel, Roger A. Butler and Delon Hampton, GT1:Jan 75:35:11074

Substructures
Approximate Reanalysis Techniques with Substructuring, Ahmed K. Noor and Harold E. Lowder, ST8:Aug 75:1687:11523
Free Vibration Analysis Using Substructuring, Gordon H. Holze and Arthur P. Boresi, ST12:Dec 75:2627:11788
Optimal Substructuring Schemes, Michael O'Rourke and Thomas Bizal, ST76:Aug 76:1037
Optimization in Trusses Using Optimal Control Theory, Narasingam M. Singaraj and Jawalker K. Sridhar Rao, ST5:May 75:1037:11304

Subsurface Drainage
The Guyon Model and the Experimental Subsurface Drainage Behaviour, Robert Lagace and Gilbert Sylvestre, IR76:July 76:229
Impact of Urban Utility Corridors on Agricultural Drainage, G. V. Eades, A. M. Shady and Robert S. Broughton, IR76:July 76:155
Management of Waste Fluids in Salaquifers, Raphael G. Kazmann, Oscar K. Kimbler and Walter R. Whitehead, IR4:Dec 74:413:10991
A Subsurface Drainage Cost and Hydrologic Model, Ashim K. Bhattacharya, Nader Foroud, Sie-tan Chieng and Robert S. Broughton, Preprint No.2773, Sept 76, 18pp.
Subsurface Drainage Related to Agronomic Factors on Brookston Clay Soil, E. F. Bolton and Frank R. Hore, IR76:July 76:221
Subsurface Drainage Solutions by Galerkin's Method, Purushottam Dass and Hubert J. Morel-Seytoux, IR1:Mar 74:1:10397
Subsurface Versus Surface Drainage Water Quality and Environmental Impacts, E. Penkava, IR76:July 76:97

Subsurface Investigations
Vibroflotation Compaction of Granular Hydraulic Fills, Ralph E. Brown, Preprint No.2657, Apr 76, 30pp.

Subsurface Structures
Matrix Analysis of Structure-Foundation Interaction, Fukashi Miyahara and John G. Ergatoudis, ST1:Jan 76:251:11836
Repair of Earthquake Damaged Underground Reservoir, Daniel J. Smith, Jr., CO3:Sept 74:449:10825
Subsurface Environment—Private Property or Public Domain?, William R. Walker and William E. Cox, HY11:Nov 74:1699:10958
Three-Dimensional FE Analysis of a Room and Pillar Coal Mine (A Comparison with Experiment), Robert T. Langland, NMG:June 76:II-802

Suburban Areas
Carpools at Large Suburban Technical Center, Robert Herman and Tenny Lam, TE2:May 75:311:11332

Subways
Desperate Need to Slash Construction Cost of New Subways, Eugene E. Dallaire, CE:Dec 76:37
Half a Century Progress in Soft Ground Tunneling, George A. Fox and Louis E. Nicolau, CO4:Dec 76:637:12622
Karl Terzaghi and the Chicago Subway, Ralph B. Peck, EI4:Oct 75:477:11668
Project Communication and the Washington Metro System, William S. Alldredge, PROD:Aug 76:153
The Sinking of the Amsterdam Metro, David Halperin, CE:Sept 75:92
Unique Team Effort on Washington Subway Project, Delon Hampton and David Novick, EI1:Jan 76:129:11872
Urban Tunnels—An Option for the Transit Crisis, Matt S. Walton and Richard J. Proctor, TE4:Nov 76:715:12532
Washington Metro: Our National Model, Robert S. O'Neil and Edmund A. Fairhead, CE:Sept 76:70

Suction
Old and New Concept of Tornadoes, T. Theodore Fujita, Preprint No.2784, Sept 76, 10pp.

Sudden Enlargements
Predicting Cavitation in Sudden Enlargements, James W. Ball, J. Paul Tullis and Travis Stripling, HY7: July 75:857:11442

Sulfate Attack
Durability of Concrete in Seawater, Povindar K. Mehta and Harvey H. Haynes, ST8:Aug 75:1679: 11516

Sulfates
Oxygen Depletion and Sulfate Production in Strip Mine Spoil Dams, J. H. Amend, Dinshaw N. Contractor and Chandrakant S. Desai, NMG:June 76:II-1155

Sulfur Dioxide
Air Pollution Impact of Railroad Electrification, Hal B.H. Cooper, Jr., Hoy A. Richards and Aaron T.B. Lam, EE4:Aug 76:723:12312

Sulphur
Sulfur-Asphalt Mixtures Using Poorly Graded Sands, Don Saylak, Bob M. Gallaway, Jon A. Epps and Haffizudin Ahmid, TE1:Feb 75:97:11106

Sump Pumps
Wet-Wells Volumes for Multipump Systems, Gunther Goldschmidt, IR3:Sept 74:371:10830

Supercritical Flow
Flood Routing in the System of Free Surface Tunnels, Cedo Maksimovic and Miodrag Radojkovic, WW76:Aug 76:190
Supercritical Flow Over Sills, Karam S. Karki, HY10: Oct 76:1449:12480

Supersaturation
Spillway Modification to Reduce Gas Supersaturation, Peter M. Smith, WW76:Aug 76: 667

Superstructures
Structures for Power Stations in Ontario, Canada, Wojciech A. Krajewski, PO2:Nov 76:179:12527

Supports
Low-Temperature Tests of Simulated Bridge Members, Charles G. Schilling, Karl H. Klippstein, John M. Barsom, Stephan R. Novak and Gilbert T. Blake, ST1:Jan 75:31:11049
Seismic Supports for Electrical Cable Systems, Anil K. Kar and Sitansu S. Sinha, PO1:July 75:95:11464
Shakedown of Beams on Flexible Supports, Dale G. Eyre and Theodore V. Galambos, ST5:May 76:935: 12101

Surcharge
Embankment Loading of Hydraulic Fill, Timothy K. Dahlstrand, Preprint No.2649, Apr 76, 14pp.
Some Finite Element Solutions in the Dynamics of Circular Footings, S. P. Dasgupta and N. S.V. Kameswara Rao, NMG:June 76:II-1038
Stability of Vertical Corner Cut with Concentrated Surcharge Load, Max W. Giger and Raymond J. Krizek, GT1:Jan 76:31:11842

Surf
Currents and Sand Transport on Beaches: A Review, Paul D. Komar, Preprint No.2707, Apr 76, 27pp.

Surface Chemistry
Water to Air Bacterial Transfer by Bursting Bubbles, D. Wozniak, M. Kiwak, C. Cahoon and Robert H. Edgerton, EE3:June 76:567:12197

Surface Drainage
Impact of Urban Utility Corridors on Agricultural Drainage, G. V. Eades, A. M. Shady and Robert S. Broughton, IR76:July 76:155
Quality of Irrigation Water and Surface Drainage, Johannes C. Guitjens, W. W. Miller and C. N. Mahannah, IR76:July 76:117
Subsurface Versus Surface Drainage Water Quality and Environmental Impacts, E. Penkava, IR76:July 76:97

Surface Irrigation
Automated Valves for Surface Irrigation Pipelines, Allan S. Humpherys and Robert L. Stacey, IR2: June 75:95:11380
Design of Irrigation Runoff Recovery Systems, Glen E. Stringham and Safa N. Hamad, IR3:Sept 75:209: 11569
Physical Model Study of Border-Strip Irrigation, Graham A. Jobling and A. Keith Turner, IR4:Dec 73:493:10195

Surface Properties
Nonlinear Flow of Wave Crests Past a Thin Pile, Robert J. Hallermeier, WW4:Nov 76:365:12551

Surface Resistance
Ground-Water Pollution Near a Landfill, William E. Kelly, EE6:Dec 76:1189:12609

Surface Roughness
Analysis of Flow through Vegetation, Sylvester Petryk, HY7:July 75:871:11457

Surface Runoff
Evaluation Strategies of Metal Pollution in Oceans, Kenneth Y. Chen and R. Addis Lockwood, EE2: Apr 76:347:12023
Laboratory Experiments with Surface Runoff, Ivan Muzik, HY4:Apr 74:501:10463
Mathematical Aspects of Surface Runoff, Vijay P. Singh, WW76:Aug 76:773
Time of Concentration of Overland Flow, Vulli L. Gupta and Peter J. Sinclair, TN: HY4:Apr 76:547: 12018
Unit Hydrograph Parameters Versus Urbanization, David L. Gundlach, TN: IR3:Sept 76:388:12369

Surface Water Runoff
Environmental Changes from Surface Water Development, George H. Hargreaves, IR76:July 76: 298
Surface Runoff Hydrograph Equation, Vulli L. Gupta and Syed Afaq Moin, HY10:Oct 74:1353:10880
Urban Runoff Pollution Control—State-of-the-Art, Richard Field and John A. Lager, EE1:Feb 75:107: 11129

Surface Waters
Effects of Overbank Flow in Flood Computations, Tawatchai Tingsanchali and Norbert L. Ackermann, HY7:July 76:1013:12266
Environmental Changes from Surface Water Development, George H. Hargreaves, IR76:July 76: 298
Solutions to Green-Ampt Infiltration Equation, Ruh-Ming Li, Michael A. Stevens and Daryl B. Simons, IR2:June 76:239:12196

Surface Waves
Computation of Wave Heights Due to Refraction and Friction, Ove Skovgaard, Ivar G. Jonsson and Jens Aa. Bertelsen, WW1:Feb 75:15:11100
Pressure Field at Deep Depth due to Surface Motion, J. D. Lin and Edward Y.T. Kuo, OE75:June 75: 1276
Surface Currents in the Arctic and Sub-Arctic Seas as Deduced from Satellite Photographs of Ice Floes, Paul E. La Violette, OE75:June 75:1166

Surges
Six-Degrees-of-Freedom Motions, Moored Ship in Waves, Basil W. Wilson, OE75:June 75:646

Surge Tanks
Oscillations in Surge Tanks, Mohammad Akram Gill, HY10:Oct 74:1369:10891

Surveillance
Statistical Aspects of Containment Tendon Surveillance, Mahendra P. Singh and Adolf Walser, PO1:July 75:23:11406

Surveying
Automatic Surveying — Updating Canada's Control, Leslie O'Brien, CE:Feb 76:57
Automation in Surveying and Mapping: Present and Future, Morris M. Thompson, Preprint No.2760, Sept 76, 17pp.
Bridge Construction Surveying, Ray W. Burgan, Jr., CO2:June 74:105:10602
Corner Restoration in Missouri, Norman L. Brown, SU1:Oct 75:101:11658
Critical Areas for Research in Oceanographic and Hydrographic Surveying and Charting, Harold D. Palmer, SU1:Oct 75:43:11627
A Decade of Research in Surveying and Mapping, Morris M. Thompson, SU1:Oct 75:1:11626
Electro-Optical Short-Range Surveying Instruments, Narendra K. Saxena, SU1:Oct 75:137:11630
Evaluation of Automatic Cartographic Systems for Engineering Mapping Functions, Antonio M. Aguilar, SU1:Oct 75:17:11625
Investigation of Dynamic Taping, Bruce W. Golley and John Sneddon, SU2:Nov 74:115:10938
Landmarks Attest CE Contribution to Progress, CE: Aug 76:76
Landslide Hazard Mapping on a Shoestring, Clarence B. Drennon and William G. Schleining, SU1:Oct 75:107:11655
Land Surveying Research: 1965-1975, John A. Dearinger, SU1:Oct 75:51:11649
Marine Geodesy — Precise Ocean Surveys, Narendra K. Saxena, SU1:Oct 75:73:11631
New Adjustment of North American Datum and Surveyor, John D. Bossler, William E. Stephens, James R. Plasker, Wesley V. Hull and Douglas R. Lee, SU1:Oct 75:115:11657
New Procedure for Numerical Relative Orientation, Santosh K. Mahajan, SU2:Nov 74:155:10962
Ocean-Bottom Control Net-Unit Configuration, Narendra K. Saxena and Dimitrios P. Xirodimas, SU1:Dec 76:53:12642
Preparation of Surveying Safety Manual for Missouri, Ward R. Malisch and Arthur W. Jacobs, SU1:Oct 75:129:11656
Research Activity and Needs in Engineering Surveying, Gunther Greulich, SU1:Oct 75:65:11610
Simultaneous Geodimeter and Tellurometer Distances, Wolfgang M. Gopfert, SU1:Oct 75:89: 11623
Surveying-Mapping Research from Earth Satellites, Charles K. Paul, SU1:Oct 75:27:11628
Tunnel Survey and Tunneling Machine Control, Edward W. Peterson and Peter Frobenius, SU1:Sept 73:21:10008

Surveying and Mapping Award
1976 Surveying and Mapping Award Presented to Kenneth S. Curtis, CE:Oct 76:104

Surveying Instruments
Critical Areas for Research in Oceanographic and Hydrographic Surveying and Charting, Harold D. Palmer, SU1:Oct 75:43:11627
Simultaneous Geodimeter and Tellurometer Distances, Wolfgang M. Gopfert, SU1:Oct 75:89: 11623
Tunnel Survey and Tunneling Machine Control, Edward W. Peterson and Peter Frobenius, SU1:Sept 73:21:10008

Surveys
Corner Restoration in Missouri, Norman L. Brown, SU1:Oct 75:101:11658
Research Activity and Needs in Engineering Surveying, Gunther Greulich, SU1:Oct 75:65:11610
Survey Program for Civil Works Projects, William A. Angeloni, SU1:Oct 75:121:11662

Surveys (Data Collection)
Live-Load Survey Results for Office Buildings, Charles G. Culver, ST12:Dec 76:2269:12615
Preoperational and Operational Hydrothermal Field Data Acquisition and Analysis, Mark Markofsky, HY12:Dec 76:1711:12597
A Survey of Class I Bikeway Pavements, Thomas H. Crawford, R. Gary Hicks, James J. Berryhill and James S. Lai, BP75:Dec 75:278
Survey of Current Research on Cold-Formed Structures, Shien T. Wang, Chmn., Preprint No.2807, Sept 76, 42pp.

Suspended Load
Fate of Metals in Wastewater Discharge to Ocean, Naresh K. Rohatgi and Kenneth Y. Chen, EE3: June 76:675:12194

Suspended Sediments
Chemical Reactions During Disposal Operations, Thomas H. Wakeman and Calvin C. Fong, Preprint No.2712, Apr 76, 18pp.
Effects of Suspended Dredged Material on the Commercial Crab, *Cancer Magister*, Richard Peddicord and Victor McFarland, DIEE:Jan 76:633
Modeling of Coastal Dredged Material Disposal, Stuart P. Bowen, DIEE:Jan 76:202
Satellite Measurements of Turbidity of Coastal Waters, Edward Yost, OE75:June 75:1170
Sediment Discharge by Glacier-Fed Rivers in Alaska, Craig H. Everts, WW76:Aug 76:907
Side Scan Sonar Views of Channel Disturbances Associated with Marine Traffic and Dredging, Larry S. Slotta, DIEE:Jan 76:226
Suspended Sediment in Chesapeake Bay, J. R. Schubel, OE75:June 75:245
Ultimate Fate of Suspended Material in Estuaries, Ray B. Krone, DIEE:Jan 76:180
Variation of Suspended Sediment in Sand Bed Canals, Gary L. Eyster and Khalid Mahmood, WW76:Aug 76:924

Suspended Solids
Dredged Material Confinement Facilities as Solid-Liquid Separation Systems, Raymond J. Krizek, Joseph A. FitzPatrick and Dimitrios K. Atmatzidis, DIEE:Jan 76:609
Effects of Suspended Dredged Material on the Commercial Crab, *Cancer Magister*, Richard Peddicord and Victor McFarland, DIEE:Jan 76:633
Extended Plain Sedimentation, Kuan M. Yao, EE3: June 75:413:11392
Sediment-Water Interaction during Dredging Operations, John F. Sustar, Thomas H. Wakeman and Richard M. Ecker, DIEE:Jan 76:736
Turbidity-Suspended Solids in Channel Construction, James L. Hunt and John J. Mank, Preprint No.2794, Sept 76, 15pp.

Suspended Structures
Analysis of Cable Dynamics—State-of-the-Art Summary, John H. Nath, OE75:June 75:623
Analytical Solutions for Pretensioned Cable Nets, H. Max Irvine, EM1:Feb 76:43:11908
Behavior of Prestressed Cable Truss Structures, Dwight E. Urelius and David W. Fowler, ST8:Aug 74:1627:10747
Earthquake Behavior of Suspended-Floor Buildings, Barry J. Goodno and James M. Gere, ST5:May 76: 973:12105
Post-Elastic Response of Suspended Cables, H. Max Irvine, EM6:Dec 75:725:11760
Statics of Suspended Cables, H. Max Irvine, EM3: June 75:187:11351
Steel Stress-Ribbon Concept — Will It Save Money?, Robert J. Wheen, CE:May 76:74
Sytems Approach to the Mechanics of Array Cables, Rolf G. Kasper, OE75:June 75:610

Suspension
Dynamic Response of Settling Basins, Sadataka Shiba and Yoriteru Inoue, EE5:Oct 75:741:11609
Ultimate Fate of Suspended Material in Estuaries, Ray B. Krone, DIEE:Jan 76:180

Sweden
Civil Engineers and Unions in Sweden, Robert D. Holtz, CE:Nov 75:53

Swelling
A Case History of Expansive Claystone Damage, Richard L. Meehan, Michael T. Dukes and Patrick O. Shires, GT9:Sept 75:933:11590
Experimental Work for Active Clays in Mississippi, T. C. Paul Teng and M. Barrett Clisby, TE1:Feb 75:77:11105
Swelling Rock: A Review, Ernest N. Lindner, GT76: Aug 76:141

Symmetry
Aesthetics is a Do-It-Yourself Project, Raymond C. Reese, ST76:Aug 76:33
Elastic Behavior of Tapered Monosymmetric I-Beams, Sritawat Kitipornchai and Nicholas S. Trahair, ST8:Aug 75:1661:11479
Space Trusses with Brittle-Type Strut Buckling, Lewis C. Schmidt, Peter R. Morgan and John A. Clarkson, ST7:July 76:1479:12274

Systems Analysis
A Crtical Review of ASCE's Planning and Policy Process, Thomas C. Kavanagh, EI4:Oct 74:343: 10890
Engineering of Public Systems, Gorman Gilbert and Jarir S. Dajani, EI1:Jan 75:15:11068
Hydraulic Collection and Disposal of Refuse, Jochen Kuhner and Peter M. Meier, EE4:Aug 76:769: 12296
Improving Downtown Circulation and Environment — Bring Back the Trolley Bus?, Walter Kudlick, Preprint No.2810, Sept 76, 12pp.
Multilevel Approach to Optimum Structural Design, Uri Kirsch, ST4:Apr 75:955:11259
Project Delivery Systems for Construction Projects, Kenath A. Kettle, CO4:Dec 76:575:12594
Structural System Failure Analysis in a High Load Environment, Jon D. Collins, ST76:Aug 76:39
System Identification of Frames under Seismic Loads, Nestor Distefano and B. Pena-Pardo, EM2: Apr 76:313:12047
Systems Analysis in Evaluating the Economics of New and Maintenance Dredging Projects, William W.L. Lee, DIEE:Jan 76:364
The Systems Approach and Construction Management, Stanley Goldhaber, PROD:Aug 76:71
Systems Aspects of Water Resources Planning in America: 1776 to 1976, Stephen J. Burges, Preprint No.2754, Sept 76, 34pp.
Sytems Approach to the Mechanics of Array Cables, Rolf G. Kasper, OE75:June 75:610

Systems Engineering
ACI Building Code in Decision Logic Table Format, Jimmy L. Noland and Chuan C. Feng, ST4:Apr 75: 677:11220
Analytical Model of Hydraulic Pipeline Dredge, David R. Basco, WW1:Feb 75:33:11097
Automated Ground Transportation System Stations with Multiple Loading Positions, Dietrich R. Bergmann, TE2:May 75:383:11328
Building Construction Management Game, Kenneth F. Reinschmidt, James W. Litchfield and Steven D. Hunt, EI2:Apr 75:117:11248
Civil Engineering and Offshore Construction, Ben C. Gerwick, Jr., Preprint No.2753, Sept 76, 6pp.
Concepts of Project Planning and Control, Boyd C. Paulson, Jr., CO1:Mar 76:67:11984
Cost Optimization of Rural Water Systems, Robert B. Robinson and T. Al Austin, HY8:Aug 76:1119: 12301
Design of Conduit System with Diverging Branches, Kwang-Ping Yang, Tung Liang and I-Pai Wu, HY1: Jan 75:167:11080
Design of Pressure Transient Control System, Morris Driels, HY5:May 75:437:11280
Economics of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO2:Nov 76:147:12515
Feedback from Field Studies of Hydraulic Dredges, David R. Basco, WW3:Aug 75:277:11526
FILES: Automated Engineering Data Management System, Leonard A. Lopez, ST4:Apr 75:661:11241
Integrated System for Production of Joists, A. Murray Lount and Sidney H. Simmonds, ST4:Apr 75:807:11242
Interdisciplinary Approach to Central City Development, Albert A. Dorman, Preprint No.2749, Sept 76, 10pp.
Large-Scale Estuarine Water Quality Matrix Model, Bhaskara R. Penumalli, Robert H. Flake and E. Gus Fruh, EE1:Feb 76:191:11946
LOMARK: A Bidding Strategy, Richard Louis Wade and Robert B. Harris, CO1:Mar 76:197:11961
Long-Term Operation of Storage Hydro Projects, W. F. Caselton and Samuel O. Russell, WR1:Apr 76: 163:12089
Low Flow Modeling in Small Steep Watersheds, David S. Bowles and J. Paul Riley, HY9:Sept 76: 1225:12405
Measuring Transportation System Performance, Thomas R. Mongan, N. J. Nielsen and J. R. Formby, TE3:Aug 75:437:11483
Optimal Sizing of Urban Flood-Control Systems, Darryl W. Davis, HY8:Aug 75:1077:11490
A Practical Monthly Optimum Operations Model, Dan M. Fults, Lawrence F. Hancock and Glen R. Logan, WR1:Apr 76:63:12063
Probability of Failure of Building from Fire, Raymond H. Burros, ST9:Sept 75:1947:11567
Productivity as Influenced by Design Management Processes, Winfield O. Salter, PROD:Aug 76:1
Seismic Design of Non-Structural Building Systems, Alfred Goldberg, Preprint No.2756, Sept 76, 14pp.
Solid Waste Management: Equity Trade-Off Models, Louis A. Fuertes, James F. Hudson and David H. Marks, UP2:Nov 74:155:10913
State-of-the-Art of Geothermal Reservoir Engineering, Patrick K. Takahashi, Bill H. Chen, Ken I. Mashima and Arthur S. Seki, PO1:July 75: 111:11455
A Structural Design Process, James M. Becker, ST76: Aug 76:341
Systems Analysis and Solid Waste Planning, Robert M. Clark and James I. Gillean, EE1:Feb 74:7:10316
The Systems Approach and Construction Management, Stanley Goldhaber, PROD:Aug 76:71
Thermodynamic Models of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:1:11829

Systems Management
Construction Solid Waste, David A. Spivey, CO4: Dec 74:501:10993

Tables (Data)
Concrete Encased Steel Columns—Design Tables, Richard W. Furlong, ST9:Sept 74:1865:10807

Tailings
Finite Element Analysis of Cement Fill Exposures, John L. Meek and R. W. Kirkby, NMG:June 76:II-901
Hydraulic Transport of Copper Tailings, Pablo Kleiman, TN: HY10:Oct 76:1589:12444
Oxygen Depletion and Sulfate Production in Strip Mine Spoil Dams, J. H. Amend, Dinshaw N. Contractor and Chandrakant S. Desai, NMG:June 76:II-1155

Tailwater
Irrigation Tailwater Loss and Utilization Equations, Arland D. Schneider, TN: IR4:Dec 76:461:12592

Taiwan
Shih-Kang Dam Multi-Purpose Development Project, Walter Chin Mih, WW76:Aug 76:1630
Shin-Shen Canal Diversion Structure — Taipei, Taiwan, Richard R. Deussen, WW76:Aug 76:1459

Tall Buildings
Analysis of Interconnected Open Section Shear Wall Structures, Bungale S. Taranath, ST11:Nov 75: 2367:11736
Analysis of Shear Cores Using Superelements, Barry J. Goodno and James M. Gere, ST1:Jan 76:267: 11837
Analysis of Tall Buildings Using Member Groups, David J. Harman and William H. Walker, ST3:Mar 75:567:11173
Approximate Analysis of Multistory Multibay Frames, Paul C.K. Chan, Arthur C. Heidebrecht and Wai K. Tso, ST5:May 75:1021:11302
Birth of the Skyscraper, CE:July 76:61
Comparison of Three-Dimensional Analysis of Concrete Shear Wall Buildings and Their Actual Behavior, Venkataswamy Ramakrishnan, ST76:Aug 76:95
Continuum Method for Overall Stability of Tall Asymmetric Buildings, Ari Danay, Menachem Gellert and Jacob Gluck, ST12:Dec 75:2505:11761
Dynamic Tornadic Wind Loads on Tall Buildings, Yi-Kwei Wen, ST1:Jan 75:169:11045
Effect of Building Regulations on Built Environment, Daniel L. Schodek, EI3:July 76:293:12261
Elastoplastic Analysis of Coupled Shear Walls, Kumarapillai K. Nayar and Alexander Coull, ST9: Sept 76:1845:12401
Empire State: Greatest of All Skyscrapers, CE:July 76:65
Equivalent Static Wind Loads for Tall Building Design, Emil Simiu, ST4:Apr 76:719:12057
Further Aspects of Design by PΔ Model, Brian R. Wood, Denis Beaulieu and Peter F. Adams, ST3: Mar 76:487:11973
High Rise Building Column Design, Jerome S.B. Iffland, Preprint No.2740, Sept 76, 28pp.
Hi-Rise in Wood, Frank Horner, Preprint No.2798, Sept 76, 8pp.
Inelastic Sway Buckling of Multistory Frames, Francois Cheong-Siat-Moy, ST1:Jan 76:65:11848
Job-Site Innovations Slash Time, Cost of Constructing Canada's Tallest Skyscraper, Keith E. Roberts, CE:Aug 76:42
Landmarks in Reinforced Concrete, John A. Diehl, CE:Nov 75:87
Linear Structural Analysis of Multistory Buildings, R. Shankaran Nair, ST3:Mar 75:551:11163
Mean Speed Profiles of Hurricane Winds, Emil Simiu, V. C. Patel and John F. Nash, EM2:Apr 76: 265:12044
Measurements and Evaluation of Building Response to Ground Motion at Various Stages of Construction, Kenneth K. Honda, ST76:Aug 76:403
Modal Control of Multistory Structures, Charlesworth R. Martin and Tsu T. Soong, EM4: Aug 76:613:12321
New Concepts-Byproducts of Computer Technology, Fazlur R. Khan, ST4:Apr 75:627:11243
New Orleans Grows on Deep Piles, Roney A. Heinz, CE:Apr 76:73
Overall Elastic Stability of Multistory Buildings, R. Shankaran Nair, ST12:Dec 75:2487:11762
Response to Stochastic Wind of N-Degree Tall Buildings, William E. Saul, P. Jayachandran and Alain H. Peyrot, ST5:May 76:1059:12112
Rock Slopes in an Urban Environment (A Case History), David E. Pauls and James G. LaBastie, GT76:Aug 76:182
Simplified Analysis of Framed-Tube Structures, Alexander Coull and Bishwanath Bose, ST11:Nov 75:2223:11696
Simulation of N-Degree Stochastic Wind Force Vector for the Three-Dimensional Dynamic Analysis of Tall Buildings, P. Jayachandran and William E. Saul, ST76:Aug 76:269
Tall Buildings under Five-Component Earthquakes, Emilio Rosenblueth, TN: ST2:Feb 76:455:11886
Three-Dimensional Analysis of Shear Wall Buildings to Lateral Load, Jayanta K. Biswas and Wai K. Tso, ST5:May 74:1019:10537
Torsional Response of High-Rise Buildings, Gary C. Hart, Roger M. DiJulio, Jr. and Marshall Lew, ST2: Feb 75:397:11126
Urban Life and Tall Buildings, Lynn S. Beedle, TN: UP1:Aug 76:237:12336
VPM Scheduling for High-Rise Buildings, James J. O'Brien, CO4:Dec 75:895:11773
9000 psi Concrete — Why? Why not?, William Schmidt and Edward S. Hoffman, CE:May 75:52

Tanker Ships
The Influence of Water Depth on Ship Motion in Oblique Waves, C. H. Kim, OE75:June 75:653
Ju'aymah Crude Oil Loading Terminal, R. D. Lee, Preprint No.2642, Apr 76, 22pp.
OCIMF Marine Terminal Activities, Thomas F. Bell, Preprint No.2654, Apr 76, 25pp.
SPM Model Testing for Proposed U.S. Superports, J. Phil Wilbourn, Preprint No.2685, Apr 76, 20pp.
180-Ft. x 1000-Ft. Shipbuilding Dock for National Steel and Shipbuilding Company, Ronald A. Dahlin, Preprint No.2671, Apr 76, 15pp.

Tanks (Containers)
Analysis of Moderately Thick Shells of Revolution, John E. Goldberg, Yu-Kuang Tang and Divaker V. Pathak, ST4:Apr 75:821:11235
Analysis of Torispherical Pressure Vessels, Ganapathy V. Ranjan and Charles R. Steele, EM4: Aug 76:643:12335
Column Supported Cylindrical-Conical Tanks, Phillip L. Gould, Subir K. Sen, Robert S.C. Wang, Herman Suryoutomo and Richard D. Lowrey, ST2:Feb 76: 429:11927
Ju'aymah Crude Oil Loading Terminal, R. D. Lee, Preprint No.2642, Apr 76, 22pp.
Nonlinear Settlement Analysis by Finite Element, Leonard Domaschuk and Palaniappan Valliappan, GT7:July 75:601:11423
Seismic Design of Liquid-Storage Tanks, Howard I. Epstein, ST9:Sept 76:1659:12380
Stresses in GRP Cylinders with Radial Line Load, Fred C. McCormick and Richard T. Hunt, EM4: Aug 75:417:11520

Taper
Elastic Behavior of Tapered Monosymmetric I-Beams, Sritawat Kitipornchai and Nicholas S. Trahair, ST8:Aug 75:1661:11479

Taping
Investigation of Dynamic Taping, Bruce W. Golley and John Sneddon, SU2:Nov 74:115:10938

Taxes
Building and Operating Costs Versus Rental Income, Clayford T. Grimm, EI3:July 76:355:12270
Future of Highways, Fiscal Constraints, Srikanth Rao, Thomas D. Larson and Theodore H. Poister, Preprint No.2768, Sept 76, 24pp.
Kingwood: A Non-Assisted Private Suburban Development, Daniel B. Stauffer, Preprint No.2656, Apr 76, 26pp.
The Miami Conservancy District — A Study in Self Help, L. Bennett Coy, Preprint No.2747, Sept 76, 11pp.
Scope of Socio-Economics Considerations, E. J. Schmidt, EFEEC:Aug 75:272
Transportation Energy Considerations, Alexander French, TE1:Feb 76:27:11919

Taxicabs
Synthesizing Taxicab Improvements, Joseph C. Corradino, TE4:Nov 76:793:12545

Taxicab Usage
Analysis of Metered Taxi Fares, David Ghahraman, Tung Au and Dwight M.B. Baumann, TE4:Nov 75: 807:11735
Paratransit: How You May Get Around if the Energy Shortage Takes You Out of Your Car, CE: Oct 75:84
Synthesizing Taxicab Improvements, Joseph C. Corradino, TE4:Nov 76:793:12545

Taylors Series
Approximate Reanalysis Techniques with Substructuring, Ahmed K. Noor and Harold E. Lowder, ST8:Aug 75:1687:11523

T Beams
An Investigation of the Effective Width of the Reinforced Concrete T-Beam, Gajanan M. Sabnis and William D. Lord, Preprint No.2746, Sept 76, 30pp.

Teaching Methods and Content
Engineering Educator-Practitioner Interchange: Challenge, David Novick, EI1:Jan 76:21:11865
Teaching Structural Analysis and Design Using Computers, Oktay Ural, Preprint No.2737, Sept 76, 8pp.

Technical Feasibility
Load Factor Analysis of Design of Bridges, James C. Porter, ST5:May 76:891:12098

Technology
Ford and Carter—Their Views on Technology, CE: Oct 76:70
Ford and Carter—Their Views on Technology, CE: Oct 76:70
More on "The Existential Pleasures of Engineering," by Samuel C. Florman (Book Review), W. E. Howland, CE:Sept 76:38

Technology Assessment
Evaluating the Constructed Environment; A Comparison of Two Biomedical Research Laboratories, Robert Gutman and Barbara Westergaard, EFAN:Dec 74:14
Five Decades of Progress in Pipelining, David R. Williams, Jr., CO4:Dec 75:751:11770
Improving Downtown Circulation and Environment — Bring Back the Trolley Bus?, Walter Kudlick, Preprint No.2810, Sept 76, 12pp.
Municipal Problems with P.L. 92-500 — Conformance Versus Performance, Arthur F. Vondrick, Preprint No.2645, Apr 76, 15pp.
OTA: Mixing Technology and National Goals, Emilio Q. Daddario, CE:Dec 75:78
Planning Water Resources Research Programs, John S. Gladwell, WR1:Apr 76:3:12072
A Review of Electronic Computing for Civil Engineering Within the Federal Government, David R. Schelling, Preprint No.2818, Sept 76, 29pp.
Summary for Session II - Human Factors Affecting the Constructed Environment, Kevin E. Coray and Ronald W. Petersen, EFAN:Dec 74:249
Technology Assessment Workshop Urges Greater Participation, CE:Nov 76:47
We Created the Problem; Only We Can Solve It!, Jack R. Janney, EI3:July 75:429:11436

Telecommunication
Practical Applications of the Mini Computer to Structure in Railway Maintenance Programs, Noam Eimer and Richard A. Teichman, Jr., ST76:Aug 76: 675

Telescopes
Structural Design of Large Space Telescope, Gerald W. Arnts, Jr., TE2:May 76:363:12132

Tellurometers
Simultaneous Geodimeter and Tellurometer Distances, Wolfgang M. Gopfert, SU1:Oct 75:89: 11623

Temperate
Temperature Dynamics in Dimictic Lakes, Heinz Stefan and Dennis E. Ford, HY1:Jan 75:97:11058

Temperature
Analysis and Interpretation of a Heated Jet, H. H. Carter, Donald W. Pritchard and S. R. Rives, OE75:June 75:1420
Augmentation of 1968-1972 Winter Storms in New Mexico, Conrad G. Keyes, Jr., HY12:Dec 76:1725: 12616
Chlorine Disinfection of Low Temperature Waters, Leroy C. Reid, Jr. and Dale A. Carlson, EE2:Apr 74:339:10443
Frost Heaves — A Major Dilemma for Ice Arenas, Bruce M. Thorson and J. S. Braun, CE:Mar 75:62
Membrane Solutions for Shells with Edge Constraint, Charles R. Steele, EM3:June 74:497:10605
Numerical Prediction of Thermal-Regime of Rivers, Poothrikka P. Paily and Enzo O. Macagno, HY3: Mar 76:255:11997
One-Dimensional Temperature Predictions in Unsteady Flows, Dominque N. Brocard and Donald R.F. Harleman, HY3:Mar 76:227:11982
Oxygen Transfer at High Solids Concentrations, Dale R. Baker, Raymond C. Loehr and Arthur C. Anthonisen, EE5:Oct 75:759:11641
Rapid Temperature Reduction of Thermal Discharge, Ronald D. Townsend and David L. Egar, HY5:May 75:529:11312
Role of Eddy Diffusivity in Thermocline Formation, Brian Henderson-Sellers, EE3:June 76:517:12174
Soil Moisture Movement by Temperature Gradient, Arved J. Raudkivi and Nguyen Van U'u, GT12:Dec 76:1225:12645
Steady Stratified Circulation in a Cavity, Der-Liang Young, James A. Liggett and Richard H. Gallagher, EM1:Feb 76:1:11903
Submerged Buoyant Jets in Quiscent Fluids, Daniel T.L. Chan and John F. Kennedy, HY6:June 75:733: 11383
Temperature Effects on Aerobic Digestion Kinetics, Clifford W. Randall, James B. Richards and Paul H. King, EE5:Oct 75:795:11646
Thermal Analysis of Frozen Embankment Islands, Guy R. Bafus and Gary L. Guymon, WW2:May 76:123:12139
Thermal Loading of Thin-Shell Concrete Cooling Towers, Richard D Larrabee, David P. Billington and John F. Abel, ST12:Dec 74:2367:11002
Thermal Stress as a Narrow-Band Random Load, Robert A. Heller, EM5:Oct 76:787:12450
Thermodynamic Models of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:1:11829
Transient Hydrothermal Analysis of Small Lakes, Lawrence A. Loziuk, James C. Anderson and Ted B. Belytschko, PO2:Nov 73:349:10150
Unsteady Stratified Circulation in a Cavity, Der-Liang Young, James A. Liggett and Richard H. Gallagher, EM6:Dec 76:1009:12643
Vertical Temperature Profiles in Open-Channel Flow, Eric J. Schiller and William W. Sayre, HY6:June 75:749:11389
Winter-Regime Thermal Response of Heated Streams, Poothrikka P. Paily, Enzo O. Macagno and John F. Kennedy, HY4:Apr 74:531:10479

Temperature Distribution
Heat Disposal in Water Environment, Donald R.F. Harleman, HY9:Sept 75:1117:11585
Structural Fire Resistance of Concrete, Eduardo Salse and Tung D. Lin, ST1:Jan 76:51:11835
Vertical Temperature Profiles in Open-Channel Flow, Eric J. Schiller and William W. Sayre, HY6:June 75:749:11389
Water-Temperature Changes Downstream from a Major Reservoir at Cannonsville, N.Y., Robert E. Fish and Nobuhiro Yotsukura, IR76:July 76:481

Temperature Gradients
Analysis and Interpretation of a Heated Jet, H. H. Carter, Donald W. Pritchard and S. R. Rives, OE75:June 75:1420
Creep and Shrinkage in Reactor Containment Shells, Zdenek P. Bazant, Domingo J. Carreira and Adolf Walser, ST10:Oct 75:2117:11632
Soil Moisture Movement by Temperature Gradient, Arved J. Raudkivi and Nguyen Van U'u, GT12:Dec 76:1225:12645

Temporal Environments
Population Change: An Indicator of Freeway Impact, Pai-kang Wang, George L. Peterson and Joseph L. Schofer, TE3:Aug 75:491:11492

Tennessee
Constant Water Level Harbor: Memphis, Tennessee, Frank P. Palumbo, Jr., WW76:Aug 76:296
Tackling Major Highway Landslides in the Tennessee Mountains, David L. Royster, CE:Sept 75:85

Tennessee Valley Authority
Development of the Water Resources in the Tennessee Valley Region, Bevan W. Brown, Jr., Preprint No.2799, Sept 76, 22pp.
Integrated River System Operation in a Major Flood, Alfred J. Cooper and Clifford A. Roberts, PO1:Jan 76:63:11825

Tensile Strength
Behavior of Compacted Soil in Tension, Abbanki V. Gopala Krishnayya, Zdenek Eisenstein and Norbert R. Morgenstern, GT9:Sept 74:1051:10828

Tensile Stress
Behavior of Compacted Soil in Tension, Abbanki V. Gopala Krishnayya, Zdenek Eisenstein and Norbert R. Morgenstern, GT9:Sept 74:1051:10828

Tension
Interlock Tension in Steel Sheet Piling, J. Neil Kay, ST10:Oct 75:2093:11638
Reliability of Prismatic Bars in Tension, Emilio Rosenblueth and Alfredo Careaga, TN: EM3:June 76:563:12168
Sheet Pile Interlock Tension-Probabilistic Design, James Neil Kay, GT5:May 76:411:12122

Terminal Facilities
Air Passenger Handling Facilities: Future Planning-Design Impacts, Hanan A. Kivett, Chmn., TE3:Aug 76:461:12289
The Dallas/Fort Worth Airport Project, Raymond J. Hodge, Preprint No.2703, Apr 76, 10pp.
Ju'aymah Crude Oil Loading Terminal, R. D. Lee, Preprint No.2642, Apr 76, 22pp.
Los Angeles Pioneers Separate Busway, Richard C. Gallagher, CE:Jan 75:64
Method for Designing Airport Terminal Concepts, John P. Braaksma and John H. Shortreed, TE2: May 75:321:11308
Multilane Passenger Conveyors, Edward W. Walbridge, TE3:Aug 75:463:11485
New Institutions for Joint Development, Rodney E. Engelen, UP1:May 75:11:11288
Pioneer Offshore LNG Terminal, Joseph Peraino and William R. Rogers, CE:Apr 76:82
Planning Criteria for Bikeways, Vincent R. Desimone, TE3:Aug 73:609:9928
The Resurgence of Light Rail Transit, Martin Lenow, TE2:May 76:229:12131
Some Geotechnical Aspects of Marginal Wharf Design, William Enkeboll and Vernon A. Smoots, Preprint No.2699, Apr 76, 24pp.
Use of Simulation in Airport Planning and Design, Dana E. Low, TE4:Nov 74:985:10954

Tertiary Treatment
Influence of Activated Sludge CRT on Adsorption, Byung R. Kim, Vernon L. Snoeyink and F. Michael Saunders, EE1:Feb 76:55:11937

Testing
Centrifugal Modelling of Riverbank Failure, Sam Frydman and D. Huw Beasley, GT5:May 76:395: 12099
Durability Tests on Some Aggregates for Concrete, L. Srinivasa-Iyer, Perry M. Rahn, Venkataswamy Ramakrishnan and James E. Russell, CO3:Sept 75: 593:11574
Dynamic Environment Simulation by Pulse Techniques, Sami F. Masri and Frederick B. Safford, EM1:Feb 76:151:11923
Guidance for Load Tests of Buildings, Neal FitzSimons and Anatole Longinow, ST7:July 75: 1367:11431
An Investigation of the Effective Width of the Reinforced Concrete T-Beam, Gajanan M. Sabnis and William D. Lord, Preprint No.2746, Sept 76, 30pp.
One Owners Dam Safety Program and Its Application Under Government Regulations, Thomas A. Kelly, EFRLD:Sept 75:105
Performance of Pennsylvania Highway Drainage Inlets, Arthur W. Brune, Walter H. Graf, Erik Appel and Peter P. Yee, HY12:Dec 75:1519:11801
Polymer-Impregnated Concrete: Laboratory Studies, Einar Dahl-Jorgensen, Wai F. Chen, John A. Manson, Yu-Nan Liu and John W. Vanderhoff, TE1:Feb 75:29:11101
Response of a Column in Random Vibration Tests, Gene K. Baxter and Ross M. Evan-Iwanowski, ST9:Sept 75:1749:11568
Simple Flume for Guidance and Impingement Studies, James L. Congleton and Ronald D. Mayo, PO1:July 75:35:11416
Strength and Related Properties of Brick Masonry, Clayford T. Grimm, ST1:Jan 75:217:11066
Strength Decay of RC Columns under Shear Reversals, James K. Wight and Mete A. Sozen, ST5:May 75:1053:11311
Test Loading of Piles and New Proof Testing Procedure, Bengt H. Fellenius, GT9:Sept 75:855: 11551
Unreliability of Qualifying Active Mechanical Equipment by Testing Only, Ahmed E. Meligi, STN75:Dec 75:II-11

Test Results
Measuring Water Velocity by Ultrasonic Flowmeter, Jack C. Schuster, HY12:Dec 75:1503:11806

Tests
Bearing Strength of Reinforced Concrete Blocks, Sanat Kumar Niyogi, ST5:May 75:1125:11325
Bioassessment of the Standard Elutriate Test, Peter J. Shuba, Joe H. Carroll and Henry E. Tatem, DIEE: Jan 76:645
Circular Steel Tubes in Bending, Donald R. Sherman, Preprint No.2694, Apr 76, 27pp.
Concrete Bearing Strength—Support, Mix, Size Effect, Sanat Kumar Niyogi, ST8:Aug 74:1685: 10765
Evaluation of Resonant Column Test Devices, George R. Skoglund, William F. Marcuson, III and Robert W. Cunny, GT11:Nov 76:1147:12567
Fatigue Life Extension of Riveted Connections, Harold S. Reemsnyder, ST12:Dec 75:2591:11795
Full-Scale Tests on Tapered and Curved Glulam Beams, Vijaya K.A. Gopu and James R. Goodman, ST12:Dec 75:2609:11794
In Situ Measurement of Soil Properties, Harvey E. Wahls, Chmn., GT75:June 75
Placing Artificial Beach Nourishment, J. William Kamphuis and S. G. Bridgeman, OE75:June 75:197
Research on Titanium Wire Rope for Marine Use, Darrell A. Milburn and Michael Chi, Preprint No.2713, Apr 76, 21pp.
Seismic Qualification — Philosophy and Methods, Charles W. Roberts and George D. Shipway, PO1: Jan 76:113:11822
Start-Up Performance, Hyatt-Thermalito Power Complex, Haywood G. Dewey, Jr., Robert W. Ehrhart and William H. Young, PO2:Nov 73:405: 10169
Test Method for Seismic Qualification of Equipment, Michael de Estrada, PO1:July 74:97:10656
Tests of Welded Steel Beam-to-Column Moment Connections, John Parfitt, Jr. and Wai F. Chen, ST1:Jan 76:189:11854
Ultimate Torque of Reinforced Concrete Beams, David J. Victor, Narayanan Lakshmanan and Narayanan Rajagopalan, ST7:July 76:1337:12249
Vibratory In Situ and Laboratory Soil Moduli Compared, Robert W. Cunny and Zelma B. Fry, SM12:Dec 73:1055:10219

Texas
The Agency, The Owner, and The Engineer, in Texas, Noble J. Campbell, EFRLD:Sept 75:99
Austin's 11-Mile Sewer Tunnel Reflects Sound Economic, Environmental Alternatives, Albert M. Eldridge, CE:Aug 76:52
Back to the People: Dallas' Blueprint for the 21st Century, Michael J. McManus, CE:July 76:57
A Communications Project — D/FW Airport, Jack D. Downey, EFAN:Dec 74:168
The Dallas/Fort Worth Airport Project, Raymond J. Hodge, EFAN:Dec 74:220
The Dallas/Fort Worth Airport Project, Raymond J. Hodge, Preprint No.2703, Apr 76, 10pp.
Dam Safety — Texas Style, Joe D. Carter, EFRLD: Sept 75:79
Deep Sea Construction, S. Samuel Doughty, CO3: Sept 75:607:11575
Large-Scale Estuarine Water Quality Matrix Model, Bhaskara R. Penumalli, Robert H. Flake and E. Gus Fruh, EE1:Feb 76:191:11946
San Antonio Ranch Case Study— National Environmental Policy Act, Robert G. Honts, UP2: Nov 75:127:11683
Summary — Case Study of Dallas/Fort Worth Airport, Jack D. Downey, EFAN:Dec 74:165
Summary for Session IV —Case Study of Dallas/Fort Worth Airport, Jack L. Mahan, Jr., EFAN:Dec 74: 265
Water Quality Aspects of Agricultural and Urban Drainage, Philip B. Bedient and William G. Characklis, IR76:July 76:374
Water Recreation and Benefit Estimation for Lake Livingston (Texas), Charles W. Warner, Jr., Pat B. Fowler, G. E. Munger, Jr. and Jerry R. Rogers, Preprint No.2682, Apr 76, 16pp.

Thailand
Foundation of the Sirikit Powerhouse, James D. Gill and Leib Wolofsky, GT76:Aug 76:82

Thalweg
Meandering Thalwegs in Straight Alluvial Channels, V. Miguel Ponce and Khalid Mahmood, WW76: Aug 76:1418
Thalweg Disposal of Riverine Dredged Material, Peter F. Lagasse, Daryl B. Simons and Yung H. Chen, DIEE:Jan 76:556

Thawing
Settlement of Thawing Embankment, Bernard D. Alkire, Wilbur M. Haas and James J. Botz, TN: GT8:Aug 76:877:12287

Theodore Von Karman Medal
1976 Theodore von Karman Medal Presented to Yuan-Cheng B. Fung, CE:Oct 76:99

Thermal Diffusion
Coastal Power Plant Heat Disposal Considerations, Dean M. Golden, EE3:June 75:365:11359
Rapid Temperature Reduction of Thermal Discharge, Ronald D. Townsend and David L. Egar, HY5:May 75:529:11312

Thermal Insulation
Energy Conservation in Existing Buildings, Kneeland A. Godfrey, Jr., CE:Sept 75:79

Thermal Pollution
Analysis of Multiple Objectives in Water Quality, Yacov Y. Haimes and Warren A. Hall, HY4:Apr 75:387:11234
Civil and Environmental Engineering Aspects of Energy Complexes, Alvin S. Goodman, Editor, EFEEC:Aug 75
Coastal Power Plant Heat Disposal Considerations, Dean M. Golden, EE3:June 75:365:11359
Development of the Water Resources in the Tennessee Valley Region, Bevan W. Brown, Jr., Preprint No.2799, Sept 76, 22pp.
Diffusion and Mixing Processes of an Ocean (Abstract), Abhimanyu Swain, Harold D. Palmer and Kent T.S. Tzou, OE75:June 75:1436
The Dissipation of Excess Heat from Water Systems, Harvey E. Jobson, PO1:May 73:089:9702
Makeup Requirements for Cooling Ponds, John C. Sonnichsen, Jr., EE1:Feb 75:15:11114
Marine Ecological Impacts Associated with Power Plant Activities, B. J. Copeland and Frank N. Moseley, EFEEC:Aug 75:250
Numerical Prediction of Thermal-Regime of Rivers, Poothrikka P. Paily and Enzo O. Macagno, HY3: Mar 76:255:11997
Preoperational and Operational Hydrothermal Field Data Acquisition and Analysis, Mark Markofsky, HY12:Dec 76:1711:12597
Regional Impacts from Water Consumption and Heat Disposal in River Basins and Estuaries, Edwin T. Engman, EFEEC:Aug 75:131
River and Cooling Water Temperature Fluctuations, Heinz Stefan and V. Nguyen Chau, HY11:Nov 76: 1613:12514
Session III — Water Supply and Cooling, David R. Helwig, EFEEC:Aug 75:412
Session IV — Waste Products, Stephen K. Breslauer, EFEEC:Aug 75:414
Statistical Design Basis for Submerged Diffuser, Thomas E. Pease and Michael J. Skelly, PO1:July 75:11:11408
Waste Heat Discharges from Offshore Power Plants, E. Eric Adams, Charles W. Almquist, Diane V. Ingraham and Keith D. Stolzenbach, OE75:June 75: 41
Wastewater Reuse Aspects of Energy Complexes, Stanley J. Dea, EFEEC:Aug 75:171
Water-Temperature Changes Downstream from a Major Reservoir at Cannonsville, N.Y., Robert E. Fish and Nobuhiro Yotsukura, IR76:July 76:481
Winter-Regime Thermal Response of Heated Streams, Poothrikka P. Paily, Enzo O. Macagno and John F. Kennedy, HY4:Apr 74:531:10479

Thermal Power Plants
Air Pollution Factors in the Planning of Energy Complexes, Maynard E. Smith, EFEEC:Aug 75:211
Analysis and Interpretation of a Heated Jet, H. H. Carter, Donald W. Pritchard and S. R. Rives, OE75:June 75:1420
Diffusion and Mixing Processes of an Ocean (Abstract), Abhimanyu Swain, Harold D. Palmer and Kent T.S. Tzou, OE75:June 75:1436
Energy Complexes — Conceptual Arrangements, Ralph W. Gunwaldson, EFEEC:Aug 75:19
Makeup Requirements for Cooling Ponds, John C. Sonnichsen, Jr., EE1:Feb 75:15:11114
Marine Ecological Impacts Associated with Power Plant Activities, B. J. Copeland and Frank N. Moseley, EFEEC:Aug 75:250
New Approach to Site Selection Studies, W. Ray Seiple, PO1:July 74:63:10643
Session III — Water Supply and Cooling, David R. Helwig, EFEEC:Aug 75:412
Stability and Dynamic Analyses of Cooling Tower, Chang-hua Yeh and William Y.J. Shieh, PO2:Nov 73:339:10141
Structures for Power Stations in Ontario, Canada, Wojciech A. Krajewski, PO2:Nov 76:179:12527
Terrestrial Impact of Energy Complexes, Blaine E. Dinger, EFEEC:Aug 75:219

Thermal Stability
Thermal Effect Loads of Ships on Dock Floors, Greer W. Ferver and J. Richard Lawrence, Preprint No.2651, Apr 76, 10pp.

Thermal Stratification
Jet Discharge into a Stratified Reservoir, Rufus B. Darden, Jorg Imberger and Hugo B. Fischer, HY9: Sept 75:1211:11583
Oceanographic Survey in Support of FNPP-AGS Site, Lloyd F. Lewis, OE75:June 75:9
Unsteady Stratified Circulation in a Cavity, Der-Liang Young, James A. Liggett and Richard H. Gallagher, EM6:Dec 76:1009:12643
Water-Temperature Changes Downstream from a Major Reservoir at Cannonsville, N.Y., Robert E. Fish and Nobuhiro Yotsukura, IR76:July 76:481

Thermal Stress
Effect of Foundation Stiffness on Track Buckling, Yehia M. El-Aini, EM3:June 76:531:12216

Thermal Stresses
Ritz Solutions for Thermoelastic Cylinders, Theodore R. Tauchert, EM5:Oct 76:825:12459
Thermal Calculations for Bridge Design, Bruce W. Hunt and Nigel Cooke, ST9:Sept 75:1763:11545

Thermoclines
Role of Eddy Diffusivity in Thermocline Formation, Brian Henderson-Sellers, EE3:June 76:517:12174

Thermoelasticity
Thermoelastic/Plastic Analysis in Rock Mechanics, William G. Pariseau, NMG:June 76:II-1168

Thermoelectricity
Ritz Solutions for Thermoelastic Cylinders, Theodore R. Tauchert, EM5:Oct 76:825:12459

Thermoelectric Power Generation
Coal Pile Leachate—Quantity and Quality Characteristics, William C. Anderson and Mark P. Youngstrom, EE6:Dec 76:1239:12626
Economics of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO2:Nov 76:147:12515
Heat Disposal in Water Environment, Donald R.F. Harleman, HY9:Sept 75:1117:11585
Rapid Temperature Reduction of Thermal Discharge, Ronald D. Townsend and David L. Egar, HY5:May 75:529:11312
Significance of Water Quality to Water Resources, Vernon E. Valantine, Preprint No.2673, Apr 76, 13pp.
Thermodynamic Models of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:1:11829
Transient Hydrothermal Analysis of Small Lakes, Lawrence A. Loziuk, James C. Anderson and Ted B. Belytschko, PO2:Nov 73:349:10150

Thermonuclear Power Generation
New Sources of Power—Solar Energy, Peter E. Glaser, EI4:Oct 75:461:11661

Thickness Ratio
Numerical Solution of Moderately Thick Plates, Rajabhau S. Deshmukh and Robert R. Archer, EM5:Oct 74:903:10860

Thick Plates
Thick Plates on Elastic Foundations by Finite Elements, Otto J. Svec, EM3:June 76:461:12215

Thin Shell Structures
Buckling of Axially Loaded Open Shells, Tung H. Yang and Sidney A. Guralnick, EM2:Apr 76:199:12055
Design of Hipped Hypar Shells, Ahmed Shaaban and Milo S. Ketchum, ST11:Nov 76:2151:12543
Thermal Loading of Thin-Shell Concrete Cooling Towers, Richard D Larrabee, David P. Billington and John F. Abel, ST12:Dec 74:2367:11002

Thin Wall Pipes
Bending Strength of Rectangular Hallow Sections, Ray R. Ayers, James M. Nash and William J. Graff, ST76:Aug 76:439

Thin-Wall Structures
Large-Deflection Spatial Buckling of Thin Walled Beams and Frames, Zdenek P. Bazant and Mahjoub El Nimeiri, EM6:Dec 73:1259:10247
Simplified Theory of Thin Cylindrical Shells, Yung-shih Wang, Peter C.Y. Lee and David P. Billington, EM4:Aug 74:719:10720

Thomas A. Middlebrooks Award
Liquefaction Potential at Ekofisk Tank in North Sea, Kenneth L. Lee and John A Focht, Jr., GT1:Jan 75:1:11054
1976 Thomas A. Middlebrooks Award Presented to John A. Focht, Jr. and Kenneth L. Lee, CE:Oct 76:97

Thomas Fitch Rowland Prize
1976 Thomas Fitch Rowland Prize Presented to Daniel J. Smith, Jr., CE:Oct 76:100

Three-Dimensional
Analytical Solution for 3-D Diffusion Model, Edward Y.T. Kuo, EE4:Aug 76:805:12315
Comparison of Three-Dimensional Analysis of Concrete Shear Wall Buildings and Their Actual Behavior, Venkataswamy Ramakrishnan, ST76:Aug 76:95
Interpretation of Torsion Shear Tests on Sand, Poul V. Lade, NMG:June 76:I-381
A Numerical Model of the Time-Dependent, Three-Dimensional Structure of Circulation in Large Lakes, Ralph Ta-shun Cheng, Preprint No.2692, Apr 76, 27pp.
Optimal Substructuring Schemes, Michael O'Rourke and Thomas Bizal, ST76:Aug 76:1037
Session 6: Soil Structure Interaction — Design and Analysis, Asadour H. Hadjian, STN75:Dec 75:II-191
Simulation of N-Degree Stochastic Wind Force Vector for the Three-Dimensional Dynamic Analysis of Tall Buildings, P. Jayachandran and William E. Saul, ST76:Aug 76:269
A Stability Study of a Concrete Arch Dam Rock Abutment, Edward C.K. Tom, Nestor T. Mirafuente and Efren Estrella, GT76:Aug 76:264
Three-Dimensional Analysis of Hydroelectric Power Station, Prem S. Nigam, Om P. Jain and Mahesh B. Kanchi, PO1:Jan 76:35:11830
Three-Dimensional Analysis of Shear Wall Buildings to Lateral Load, Jayanta K. Biswas and Wai K. Tso, ST5:May 74:1019:10537
Three-Dimensional Pollutant Modeling in Shear Flow, Gour-Tsyh Yeh, HY3:Mar 76:351:12005
Three Dimensional Seismic Analysis for a Floating Nuclear Plant Using Finite Element Procedures, Harry W. Johnson, Ashok K. Vaish and Frank L. Porter, Preprint No.2700, Apr 76, 23pp.
3-D Analysis of Laterally Loaded Structures, Chandrakant S. Desai and G. C. Appel, Jr., NMG: June 76:I-405
3-D Stability Analysis of Tunnels in Jointed Rock, Walter Wittke and Bernd Pierau, NMG:June 76:III-1401

Throttling
Oscillations in Surge Tanks, Mohammad Akram Gill, HY10:Oct 74:1369:10891

Thunderstorms
Flood Peaks in Southern California Desert Areas, George E. Ribble, WW76:Aug 76:1094

Tidal Currents
Channel Entrance Response to Jetty Construction, J. M. Kieslich and Curtis Mason, OE75:June 75:689
Characteristics and Behavior of Pacific Coast Tidal Inlets, Joe W. Johnson, WW3:Aug 73:325:9927
Circulation and Surge Modeling in Pamlico Sound, N.C., Michael Amein and Damodar S. Airan, Preprint No.2665, Apr 76, 29pp.
Computation of Tidal Flow in Well-Mixed Estuaries, Carl E. Pearson and Donald F. Winter, HY3:Mar 76:367:11990
Mass Transport and Mean Water Level, Jacobus van de Kreeke, OE75:June 75:1266
Oceanographic Survey in Support of FNPP-AGS Site, Lloyd F. Lewis, OE75:June 75:9
Renewal Characteristics of Chesapeake Bay, A. Y. Kuo, Evon P. Ruzecki and Ching S. Fang, OE75: June 75:1065
Sediment Movement in Tubbs Inlet, North Carolina, Jerry L. Machemehl, Robert P. Masterson, Jr. and Victor V. Cavaroc, Jr., OE75:June 75:313
Stability Problems for the Navigation Channel in a Tidal River, Egon Giese, WW76:Aug 76:280

Thames Barrier Project, P. A. Cox, P. J. Clark and G. Miller-Richards, WW76:Aug 76:852
Tide-Induced Mass Transport in Lagoons, Jacobus van de Kreeke and Robert G. Dean, WW4:Nov 75: 393:11731

Tidal Effects
Classification of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY10:Oct 75:1315: 11643
Extreme Wind, Wave and Tide, Cheng Y. Yang, Mehmet Aziz Tayfun and M. H. Fallah, OE75:June 75:134
Pollution Prediction Model of Long Island Sound, Malcolm J. Bowman, OE75:June 75:1084
Recurrence Intervals of Abnormally High Tides by Superposition of Storm Surges over Astronomical Tides, Raymond K. DeYoung and James R. Pfafflin, OE75:June 75:79
Shin-Shen Canal Diversion Structure — Taipei, Taiwan, Richard R. Deussen, WW76:Aug 76:1459
Shoaling Rate Prediction Using a Sedimentation Tank, Craig H. Everts, OE75:June 75:294

Tidal Waters
Channel Entrance Response to Jetty Construction, J. M. Kieslich and Curtis Mason, OE75:June 75:689
Characteristics and Behavior of Pacific Coast Tidal Inlets, Joe W. Johnson, WW3:Aug 73:325:9927
Classification of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY10:Oct 75:1315: 11643
Control of High Velocity Flow Into a Tidal Basin, Alex Sheydayi, WW76:Aug 76:999
DO-Sag in Oscillating Flow, Wen-Hsiung Li and Michael Edwin Kozlowski, EE4:Aug 74:837:10713
Influence of Tidal Inlets on Salinity in Estuaries, N. Jothi Shankar, WW4:Nov 75:369:11692
Instability in Tidal Flow Computational Schemes, T. John Weare, HY5:May 76:569:12100
Mass Transport and Mean Water Level, Jacobus van de Kreeke, OE75:June 75:1266
Regime Equations and Tidal Inlets, Curtis Mason, WW3:Aug 73:393:9952
Review of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY11:Nov 75:1405:11693

Tide Gages
Recurrence Intervals of Abnormally High Tides by Superposition of Storm Surges over Astronomical Tides, Raymond K. DeYoung and James R. Pfafflin, OE75:June 75:79

Tides
Characteristics and Behavior of Pacific Coast Tidal Inlets, Joe W. Johnson, WW3:Aug 73:325:9927
Computation of Tidal Flow in Well-Mixed Estuaries, Carl E. Pearson and Donald F. Winter, HY3:Mar 76:367:11990
Extreme Wind, Wave and Tide, Cheng Y. Yang, Mehmet Aziz Tayfun and M. H. Fallah, OE75:June 75:134
Increasing the Mean Current in Coastal Channels, Jacobus van de Kreeke, WW2:May 76:223:12157
Numerical Model of St. Lawrence River Estuary, David Prandle and Norman L. Crookshank, HY4: Apr 74:517:10472
Offshore Nuclear Power Plants Workshop Results, Harry Rood and William S. Gaither, OE75:June 75: 58
Quadratic Finite Elements in Shallow Water Problems, Paul W. Partridge and Carlos A. Brebbia, HY9:Sept 76:1299:12418
Recurrence Intervals of Abnormally High Tides by Superposition of Storm Surges over Astronomical Tides, Raymond K. DeYoung and James R. Pfafflin, OE75:June 75:79
Stability Problems for the Navigation Channel in a Tidal River, Egon Giese, WW76:Aug 76:280
Tide-Induced Mass Transport in Lagoons, Jacobus van de Kreeke and Robert G. Dean, WW4:Nov 75: 393:11731
Use of Remote Sensing for Mapping Wetlands, Robert J. Reimold and Rick A. Linthurst, TE2:May 75:189:11293

Ties
Deformation of Deep Excavations, Dieter Stroh and Herbert Breth, NMG:June 76:II-686
Metal Ties and Anchors for Brick Walls, Clayford T. Grimm, ST4:Apr 76:839:12067

Tile Drainage
Bayesian Approach to Tile Drain Design, Andre Musy and Lucien Duckstein, IR3:Sept 76:317: 12390

Timber Construction
Analysis and Design of Griplam Nailed Connections, Ricardo O. Foschi and Jack Longworth, ST12:Dec 75:2537:11766
Bibliography on Timber Highway Bridge Design, Thomas G. Williamson, Chmn., ST1:Jan 75:1:11042
Bibliography on Wood and Plywood Diaphragms, J. M. Carney, ST11:Nov 75:2423:11737
Case Study of Burr Truss Covered Bridge, Emory L. Kemp and John Hall, EI3:July 75:391:11461
Computer Modeling and Testing of Timber Trusses for Design Instruction, Louis H. Klotz, Preprint No.2737, Sept 76, 30pp.
Epoxy-Repaired Bolted Timber Connections, R. Richard Avent, Leroy Z. Emkin, Robert H. Howard and Charles L. Chapman, ST4:Apr 76:821: 12061
Finite Element Analysis of Wood-Stud Walls, Anton Polensek, ST7:July 76:1317:12234
Hi-Rise in Wood, Frank Horner, Preprint No.2798, Sept 76, 8pp.
Structural Characteristics of Weathered Plywood, Michael O. Hunt and DeForest A. Matteson, Jr., ST4:Apr 76:759:12050
Tension Proof Loading for Southern Pine Beams, M. Dee Strickler and Roy F. Pellerin, ST3:Mar 76:645: 11978
Ultimate Load Test of Truss Bridge Floor System, Wallace W. Sanders, Jr., F. Wayne Klaiber, Hotten A. Elleby and Leonard W. Timm, ST7:July 76: 1383:12247
The University of Idaho Stadium: A Micro-Lam Application, Sherman A. Nelson, Preprint No.2800, Sept 76, 19pp.

Timbers
Full-Scale Tests on Tapered and Curved Glulam Beams, Vijaya K.A. Gopu and James R. Goodman, ST12:Dec 75:2609:11794
Laminated Timber Logging Bridges in British Columbia, Richard G. Scarisbrick, ST1:Jan 76:19: 11832
Pipeline Bridge Uses Timber Arches, Charles Gary Peterson, CE:Feb 75:58

Time
Anchor-Last Deployment Simulation by Lumped Masses, Robert W. Thresher and John H. Nath, WW4:Nov 75:419:11709

Time Dependence
Analysis of Consolidation in Cores of Earth Dams, Zdenek Eisenstein, Addanki V.G. Krishnayya and Steven T.C. Law, NMG:June 76:II-1089
Circulation and Surge Modeling in Pamlico Sound, N.C., Michael Amein and Damodar S. Airan, Preprint No.2665, Apr 76, 29pp.
Comparison of Numerical Schemes, John C. Bruch, Jr. and Roland W. Lewis, NMG:June 76:I-115
Conceptual RMC/Time Synthesis, Marvin Gates and Amerigo Scarpa, CO2:June 76:307:12181
A Constitutive Equation for Normally Consolidated Clays, Toshihisa Adachi, NMG:June 76:I-282
Effect of Uplift on Soil-Structure Interaction and Toe Pressure Calculation, Dale R. Bervig and Chang Chen, STN75:Dec 75:II-351
Model Study of Tunnel Prereinforcement, Gregory E. Korbin and Tor L. Brekke, GT9:Sept 76:895:12415

New Rheological Model for Soil Behavior, Fujiya Komamura and Rodney J. Huang, GT7:July 74:807: 10675
Non-Linear Flow and Deformation Analysis of Consolidated Problems, Roland W. Lewis, G. W. Roberts and Olgierd C. Zienkiewicz, NMG:June 76:II-1106
Prediction of Downdrag Forces in End-Bearing Piles, Harry G. Poulos and Edward H. Davis, GT2:Feb 75:189:11144
Rheological Model of Laterally Stressed Frozen Soil, Khandker A. Aziz and Jan T. Laba, GT8:Aug 76: 825:12316
Skin Friction in Unsteady Laminar Pipe Flow, Mario F. Letelier S. and Hans J. Leutheusser, HY1:Jan 76:41:11867
Time-Dependent Development of Strength in Dredgings, Raymond J. Krizek and Abdelsalam M. Salem, Preprint No.2640, Apr 76, 28pp.
Time-Dependent Spectral Content of System Response, Ross B. Corotis and Erik H. Vanmarcke, EM5:Oct 75:623:11648
Viscoelastic Analysis About Deformation of Weak Ground, Tomoyuki Akagi, Yoshinori Ito and Makoto Irobe, NMG:June 76:II-639
Viscoplastic Constitutive Matrix Corresponding to the Hyperbolic Sine Creep Law, Guenter W. Borm, NMG:June 76:I-357

Time Factors
Electro-Osmotic Consolidation of Soils, Tai-Yeu Wan and James K. Mitchell, GT5:May 76:473:12156
Session 6: Soil Structure Interaction — Design Time-History, P. K. Agrawal, STN75:Dec 75:II-181

Time of Concentration
Time of Concentration of Overland Flow, Vulli L. Gupta and Peter J. Sinclair, TN: HY4:Apr 76:547: 12018
Unit Hydrograph Parameters Versus Urbanization, David L. Gundlach, TN: IR3:Sept 76:388:12369
Urban Runoff by Linearized Subhydrographic Method, Jong-Song Chien and Krishan K. Saigal, HY8:Aug 74:1141:10766

Time Series Analysis
Continuous Hydrological Time-Series Discretization, Luis Valadares Tavares, HY1:Jan 75:49:11063
Correlation Analysis of Hydrometeorological Data, Ashok N. Shahane, Daniel Thomas and Paul Bock, HY10:Oct 76:1561:12484
A Stochastic Approach to the Colorado River Basin, William L. Lane, Albert E. Gibbs and Robert B. Main, Preprint No.2684, Apr 76, 26pp.
Water Quality Models Using the Box-Jenkins Method, Peter M. Huck and Grahame J. Farquhar, EE3:June 74:733:10629

Time Studies
Fifty Years of Construction Cost-Reducing Analyses, Robert L. Peurifoy, CO2:June 75:299:11371

Timing
Productivity as Influenced by Design Management Processes, Winfield G. Salter, PROD:Aug 76:1

Tire Pavement Interface
Porous Friction Course Solves Airport Hydroplaning Problem, Edward A. Johnson and Thomas D. White, CE:Apr 76:90

Tire Road Contact Forces
Porous Friction Course Solves Airport Hydroplaning Problem, Edward A. Johnson and Thomas D. White, CE:Apr 76:90

Titanium
Research on Titanium Wire Rope for Marine Use, Darrell A. Milburn and Michael Chi, Preprint No.2713, Apr 76, 21pp.
Research on Titanium Wire Rope for Marine Use, Darrell A. Milburn and Michael Chi, ST11:Nov 76: 2137:12535

Toilet Facilities
Masjid (Mosque) Designing, Altaf Hussain, UP1:Aug 76:177:12349

Toll Roads
American Road Building - Fifty Years of Progress, Herbert W. Busching and Randolph Russell, CO3: Sept 75:565:11577

Topographic Maps
The Brock and Weymouth Photogrammetric Mapping Equipment, Alfred O. Quinn, Preprint No.2789, Sept 76, 10pp.
City's Topographic Mapping System Saves Time, Money and is More Accurate, CE:Sept 76:98

Topography
Earthwork Volumes by Contour Method, Francis E. Smith, CO1:Mar 76:131:11977
Electro-Optical Short-Range Surveying Instruments, Narendra K. Saxena, SU1:Oct 75:137:11630
Marine Geodesy — Precise Ocean Surveys, Narendra K. Saxena, SU1:Oct 75:73:11631
Survey Program for Civil Works Projects, William A. Angeloni, SU1:Oct 75:121:11662

Tornadoes
Drag Forces on Tornado Borne Missiles, James F. Costello and Willy Z. Sadeh, STN75:Dec 75:II-21
Dynamic Tornadic Wind Loads on Tall Buildings, Yi-Kwei Wen, ST1:Jan 75:169:11045
Old and New Concept of Tornadoes, T. Theodore Fujita, Preprint No.2784, Sept 76, 10pp.
Optimum Design for Infrequent Disturbances, Emilio Rosenblueth, ST9:Sept 76:1807:12433
Seismic Risk Map, CE:Dec 76:59
Tornado-Borne Missile Speeds, James F. Costello, Emil Simiu and Martin R. Cordes, Preprint No.2739, Sept 76, 29pp.
Tornado-Induced Waves in a Basin, Yong Kwun Chung and Herman Bomze, OE75:June 75:96
"Wind Resistant Design Concepts for Residences," by Delhart B. Ward (Book Review), Herbert S. Saffir, CE:June 76:38
Windspeeds Analyses of April 3-4, 1974 Tornadoes, Kishor C. Mehta, Joseph E. Minor and James R. McDonald, ST9:Sept 76:1709:12429

Torque
Kink Formation and Rotational Response of Single and Multistrand Electromechanical Cables, Francis C. Liu, OE75:June 75:546

Torsion
Concrete L-Beams Subject to Combined Torsional Loads, D. Wayne Kirk and David G. McIntosh, ST1:Jan 75:269:11064
Design of Reinforced Concrete Spandrel Beams, Thomas T.C. Hsu and Kenneth T. Burton, ST1:Jan 74:209:10277
Elastic-Plastic Torsion of Nonhomogeneous Bars, Carl T. Herakovich and Rafik Y. Itani, EM5:Oct 76:757:12446
Elastoplastic Torsion of Anisotropic Bars, Pravit Boonlualohr and Somasundaram Valliappan, EM6: Dec 76:995:12634
Interpretation of Torsion Shear Tests on Sand, Poul V. Lade, NMG:June 76:I-381
Irregular Supports and Skew Diaphragms of Box Girders, Vladimir Kristek, ST5:May 74:917:10541
Rectangular Finite Element for Field Problems, Bruce W. Golley, EM3:June 76:431:12175
Stiffness Matrices for Beam Members Including Warping Torsion Effects, John L. Meek and Peter Swannell, TN: EM1:Feb 76:193:11884
Theory for Concrete Beams in Torsion and Bending, Kevin D. Below, B. Vijaya Rangan and A. Stanley Hall, ST8:Aug 75:1645:11480
Torsional Analysis of Perforated Core Structure, Avigdor V. Rutenberg and Wai K. Tso, ST3:Mar 75:539:11167
Torsional Flutter of Rectangular Prisms, Yasuharu Nakamura and Taketo Mizota, EM2:Apr 75:125: 11226

Torsional Response of Piles, Harry G. Poulos, GT10: Oct 75:1019:11629
Torsional Response of Rigid Embedded Foundation, Rany J. Apsel and Juan Enrique Luco, EM6:Dec 76:957:12627
Torsional Strength of Prestressed Concrete Beams, H. Roger Woodhead and Arthur E. McMullen, ST5: May 74:881:10545
Torsion and Flexure of Closed Thin-Walled Beams, Ray N. Nitzsche and Robert E. Miller, TN: EM1: Feb 76:189:11884
Torsion-Bending-Shear Interaction for Concrete Beams, Lennart Elfren, Inge Karlsson and Anders Losberg, ST8:Aug 74:1657:10749
Torsion of Frame-Tube Structures, Alexander Coull and Bishwanath Bose, TN: ST12:Dec 76:2366: 12593
Transmission Towers Under Torsional Loads, Albert W.G. Hanna and Richard G. Redwood, PO1:May 73:105:9701
Ultimate Torque of Reinforced Concrete Beams, David J. Victor, Narayanan Lakshmanan and Narayanan Rajagopalan, ST7:July 76:1337:12249

Torsional Strength
Inelastic Spatial Stability of Restrained Beam-Columns, Sriramulu Vinnakota and Pentti Aysto, ST11:Nov 74:2235:10919

Torsion Shear Tests
Dynamic Shear Moduli for Dry Sands, Mehmet A. Sherif and Isao Ishibashi, GT11:Nov 76:1171:12572
Effects of Straining on Shear Modulus of Clays, Donald G. Anderson and Frank E. Richart, Jr., GT9:Sept 76:975:12428

Torsion Tests
Soil Liquefaction by Torsional Simple Shear Device, Isao Ishibashi and Mehmet A. Sherif, GT8:Aug 74: 871:10752

Torts
Dams for Others, Neil F. Bogner, EFRLD:Sept 75: 137
Liability of the United States Under the Federal Tort Claims Act (28 U.S.C. ¶¶ 1346(b), 2672-80), John R. Little, Jr., EFRLD:Sept 75:121

Tower Cranes
Helicopter-Erected Tower Crane Demolishes Buildings, Charles R. Schrader, CE:May 75:60

Towers
Aerodynamic Investigations of In-Line Slender Towers for Heavy Water Plants, K. R. Cooper, H. P.A.H. Irwin and R. L. Wardlaw, ST76:Aug 76:286
Analysis and Design of Laterally Loaded Piles and Caissons in a Layered Soil System, Tarun R. Naik and Alain H. Peyrot, ST76:Aug 76:589
Concrete Technology Aspects of CN Tower, John A. Bickley, CO1:Mar 75:201:11192
Earthquake Resistant Design of Intake-Outlet Towers, Anil K. Chopra and C-Y. Liaw, ST7:July 75:1349:11422
Efficient Design-Analysis of Physically Nonlinear Trusses, Edwin C. Rossow, David L.C. Lo and Shih-Lung Chu, ST4:Apr 75:839:11257
Fifty-Year Development: Construction of Steel Suspension Bridges, James D. Dwyer, CO1:Mar 75: 105:11176
Fifty-Year Development of Naval Facilities Construction, Michael Yachnis, CO1:Mar 75:15: 11175
Multispan Stayed Girder Bridges, Niels J. Gimsing, ST10:Oct 76:1989:12470
Plastic Tower Solves Radar Interference, Paul A. Gossen and Richard L. Tomasetti, CE:Dec 76:46
Transmission Towers Under Torsional Loads, Albert W.G. Hanna and Richard G. Redwood, PO1:May 73:105:9701
Use of Computers in Transmission Tower Design, David L.C. Lo, Andrew Morcos and Surendra K. Goel, ST7:July 75:1443:11410

Toxicology
Sewage Chlorination Versus Toxicity -- A Dilemma?, Harvey F. Collins and David G. Deaner, EE6:Dec 73:761:10190

Toxic Waste Disposal
Development of Oregon's Hazardous Waste Program, Milan Synak, Patrick H. Wicks and Kenneth H. Spies, EE3:June 75:301:11355
Distribution of Toxic Heavy Metals in Marine and Freshwater Sediments, J. M. Brannon, R. M. Engler, J. R. Rose, P. G. Hunt and I. Smith, DIEE: Jan 76:455
Physicochemical Parameters that Regulate Mobilization and Immobilization of Toxic Heavy Metals, Robert P. Gambrell, Rashid A. Khalid and W. H. Patrick, Jr., DIEE:Jan 76:418
Sediment and Elutriate Toxicity to Oyster Larvae, Rick D. Cardwell, Charles E. Woelke, Mark I. Carr and Eugene W. Sanborn, DIEE:Jan 76:684

Trace Elements
Evaluation Strategies of Metal Pollution in Oceans, Kenneth Y. Chen and R. Addis Lockwood, EE2: Apr 76:347:12023
Fate of Metals in Wastewater Discharge to Ocean, Naresh K. Rohatgi and Kenneth Y. Chen, EE3: June 76:675:12194
Mobility of Trace Metals during Open Water Disposal of Dredged Material and Following Resedimentation, Kenneth Y. Chen, James C.S. Lu and Amancio Z. Sycip, DIEE:Jan 76:435
A Model for Trace Metals from Marine Outfalls, T. J. Hendricks, OE75:June 75:1353
Trace Metals in Open Water Disposal of Dredged Material, Kenneth Y. Chen, James C.S. Lu and Amancio Z. Sycip, WW4:Nov 76:443:12546

Tracers
Analysis and Interpretation of a Heated Jet, H. H. Carter, Donald W. Pritchard and S. R. Rives, OE75:June 75:1420
Comparison of Single-Point Injections in Pipe Flow, Ahmed M. Ger and Edward R. Holley, HY6:June 76:731:12172
Measurements of Estuary Dispersion Coefficients, Peter R.B. Ward, TN: EE4:Aug 76:855:12285
Sediment Movement in Tubbs Inlet, North Carolina, Jerry L. Machemehl, Robert P. Masterson, Jr. and Victor V. Cavaroc, Jr., OE75:June 75:313

Tractive Forces
Morphology of Cobble Streams in Small Watersheds, Ruh-Ming Li, Daryl B. Simons and Michael A. Stevens, HY8:Aug 76:1101:12304
Safety Factors for Riprap Protection, Michael A. Stevens, Daryl B. Simons and Gary L. Lewis, HY5: May 76:637:12115

Traffic
Acquiring Traffic Data by In-Motion Weighing, R. B. Machemehl, Clyde E. Lee and C. Michael Walton, TE4:Nov 75:681:11716
Bicycles and Traffic, Harold C. Munn, TE4:Nov 75: 753:11729
Education and Enforcement — The Sine Qua Non of the New Traffic-Mix, Larry Wuellner, BP75:Dec 75:548
The Impact of Office Space and Parking Distribution on Commuter Modal Choice, Joseph J. McCourt and William C. Miller, Preprint No.2790, Sept 76, 26pp.
Incorporating Highway Safety into Level of Service, Walter J. Diewald, TE2:May 74:417:10557
Location and Capacity of Unsignalized Exits, Ezra Hauer, TE2:May 75:179:11291
National Highway Travel Forecasts, Gary E. Maring, TE4:Nov 76:759:12558
Parking — First Stage in Downtown Redevelopment, Richard S. Beebe, Preprint No.2780, Sept 76, 10pp.
Recycling Older Buildings Preserves History, Saves Money, Harold H. Franke, CE:Oct 75:55

Traffic Volume Counting Recorders, Edward L. Priestas and Thomas E. Mulinazzi, TE2:May 75: 211:11306
Transportation Energy Considerations, Alexander French, TE1:Feb 76:27:11919
Transportation, Land Use, and Air Quality Programs, Charles E. Dare, TE2:May 76:411:12124

Traffic Accidents
Access Control on Arterial Highways, John C. Glennon and Jamil A. Azzeh, TE1:Feb 76:75:11912

Traffic Assignment
Peak-Hour Transit Routing, Stanley D. Peterson and Eugene M. Wilson, TE4:Nov 76:847:12547

Traffic Conflicts
Access Control on Arterial Highways, John C. Glennon and Jamil A. Azzeh, TE1:Feb 76:75:11912
Resolving Conflicts Between People and Cars, Herbert S. Levinson, BP75:Dec 75:97

Traffic Control
The Auto Restricted Zone/Multi-User Vehicle Systems Study: A Status Report, Beth Irons French and William S. Herald, BP75:Dec 75:197
Bus/Carpool FWY Lanes in the San Francisco Area, Leonard Newman, Preprint No.2646, Apr 76, 26pp.
Los Angeles Tackles Freeway Congestion, Kneeland A. Godfrey, Jr., CE:Sept 75:96
Planning and Implementation of the Chestnut Street Transitway, William J. Grabske and Richard K. Faris, Preprint No.2803, Sept 76, 23pp.

Traffic Control Devices
Recycling Older Buildings Preserves History, Saves Money, Harold H. Franke, CE:Oct 75:55

Traffic Counts
Types of Street Use in New Orleans, John F. Exnicios, BP75:Dec 75:10

Traffic Engineering
Los Angeles Tackles Freeway Congestion, Kneeland A. Godfrey, Jr., CE:Sept 75:96
Round Table Discussion on Future Conferences, Walter H. Kraft, BP75:Dec 75:585

Traffic Flow
Access Control on Arterial Highways, John C. Glennon and Jamil A. Azzeh, TE1:Feb 76:75:11912
Peak-Hour Transit Routing, Stanley D. Peterson and Eugene M. Wilson, TE4:Nov 76:847:12547
Walking and Biking in the Traffic Mix, Judith T. O'Connor, BP75:Dec 75:435

Traffic Generation
Traffic Generation from Land Development Proposals, Satish C. Sharma and Afifi H. Soliman, TE2:May 76:243:12153

Traffic Patterns
National Highway Travel Forecasts, Gary E. Maring, TE4:Nov 76:759:12558

Traffic Research
Education and Enforcement — The Sine Qua Non of the New Traffic-Mix, Larry Wuellner, BP75:Dec 75:548

Traffic Safety
Education and Enforcement — The Sine Qua Non of the New Traffic-Mix, Larry Wuellner, BP75:Dec 75:548
Pedestrian Versus Bicycle Versus Automobile — A Case Study, John M. Wright, BP75:Dec 75:172

Traffic Signal Controllers
Computerized Traffic Signals; Good for My City?, Kneeland A. Godfrey, Jr., CE:Nov 75:76

Traffic Signal Coordination
Computerized Traffic Signals; Good for My City?, Kneeland A. Godfrey, Jr., CE:Nov 75:76

Traffic Signals
Computerized Traffic Signals; Good for My City?, Kneeland A. Godfrey, Jr., CE:Nov 75:76
Location and Capacity of Unsignalized Exits, Ezra Hauer, TE2:May 75:179:11291
The Wrong Way is Sometimes the Right Way, Marshall Suloway, Preprint No.2697, Apr 76, 18pp.

Traffic Signal Spacing
Computerized Traffic Signals; Good for My City?, Kneeland A. Godfrey, Jr., CE:Nov 75:76

Traffic Signs
Computerized Inventory of Traffic Signs, Tapan K. Datta and David M. Litvin, TE4:Nov 75:707:11708

Traffic Surveys
The Auto Restricted Zone/Multi-User Vehicle Systems Study: A Status Report, Beth Irons French and William S. Herald, BP75:Dec 75:197
Chicago Urban Transportation Planning, Harold E. Nelson and William L. Barnes, Preprint No.2815, Sept 76, 27pp.
Planning Pedestrian Systems for a Prototype New Town in Colombia, John B. Frazier, BP75:Dec 75: 245
The Second Most Frequent Mode of Transportation, Bruce T. Caine and Robert L. Siegel, BP75:Dec 75: 41
Traffic Volume Counting Recorders, Edward L. Priestas and Thomas E. Mulinazzi, TE2:May 75: 211:11306

Traffic Volume
Traffic Volume Counting Recorders, Edward L. Priestas and Thomas E. Mulinazzi, TE2:May 75: 211:11306

Training
Education of Bicycle Riders - How Much is Enough?, John E. Baerwald, BP75:Dec 75:545

Training Walls
Notching River Training Structures: Missouri River, Thomas D. Burke, WW76:Aug 76:1647
Regime Studies of the Lower Fraser, Alfred John Tamburi, WW76:Aug 76:1680
Response of the Mississippi River to the Cutoffs, Brien R. Winkley, WW76:Aug 76:1267

Tramways
Engineering the First Mass Transit Tramway, Richard L. Tomasetti and David I. Ozerkis, CE: Nov 75:65
New York City's New Town, David I. Ozerkis, CE: Nov 75:68

Transducers
Earth Pressure on Precast Panel Retaining Wall, Harry M. Coyle and Richard E. Bartoskewitz, GT5: May 76:441:12113

Transient Flow
Approximate Solution for Unconfined Seepage, Chandrakant S. Desai, IR1:Mar 73:71:9607
A Numerical Model of the Time-Dependent, Three-Dimensional Structure of Circulation in Large Lakes, Ralph Ta-shun Cheng, Preprint No.2692, Apr 76, 27pp.
Transient Dispersion in Uniform Media Flow, Hung Tao Shen, HY6:June 76:707:12202
Transient Drainage with Nonlinearity and Capillarity, David B. McWhorter and Harold R. Duke, IR2: June 76:193:12185
Unsteady Stratified Circulation in a Cavity, Der-Liang Young, James A. Liggett and Richard H. Gallagher, EM6:Dec 76:1009:12643

Transient Response
Approximate Method for Nonlinear Random Vibration, Yi-Kwei Wen, EM4:Aug 75:389:11500
Water Hammer in Coaxial Pipe Systems, Werner Burmann, HY6:June 75:699:11374

Transients
Experiments for Accuracy and Stability of Heat Conduction, Rao Yalamanchili, NMG:June 76:1-93
Transient Hydrothermal Analysis of Small Lakes, Lawrence A. Loziuk, James C. Anderson and Ted B. Belytschko, PO2:Nov 73:349:10150

Transition Flow
Flow Visualization in Free Shear Layers, Joseph A. Clark and Eric Markland, HY11:Nov 73:1897:10119
Transient Drainage Flow Analysis for a Coastal Site, Yung-chi Chang and Yun-jui Tsai, OE75:June 75:1046

Transition Zones
Transition Curves for Speed Changes, Jacob Greenstein, TE4:Nov 76:699:12525

Transit Systems
Evaluation of Long-Range Transit Alternatives, Walter Cherwony and Lewis Polin, TE2:May 75:199:11282

Transmission Lines
Aerodynamic Investigations of In-Line Slender Towers for Heavy Water Plants, K. R. Cooper, H. P.A.H. Irwin and R. L. Wardlaw, ST76:Aug 76:286
Analysis and Design of Laterally Loaded Piles and Caissons in a Layered Soil System, Tarun R. Naik and Alain H. Peyrot, ST76:Aug 76:589
Construction of Grand Coulee Third Power Plant, Donald J. Duck, CO4:Dec 75:869:11774
Design of Steel Transmission Pole Structures, Gene M. Wilhoite, Chmn., ST12:Dec 74:2449:11009
Progress in Signaling for Track Guided Systems, Alastair D. McAulay, TE4:Nov 75:621:11695
Risk of Wind Damage to Transmission Line Systems, Alain H. Peyrot and Tarun R. Naik, ST76:Aug 76:54
Yaw Effects on Galloping Instability, Rudolf Skarecky, EM6:Dec 75:739:11759

Transmission Towers
A History of Bureau of Reclamation Construction-Part II, Harold G. Arthur, CO1:Mar 75:69:11190
Transmission Towers Under Torsional Loads, Albert W.G. Hanna and Richard G. Redwood, PO1:May 73:105:9701
Use of Computers in Transmission Tower Design, David L.C. Lo, Andrew Morcos and Surendra K. Goel, ST7:July 75:1443:11410

Transponders
Ocean-Bottom Control Net-Unit Configuration, Narendra K. Saxena and Dimitrios P. Xirodimas, SU1:Dec 76:53:12642

Transportation
Aggregate and Disaggregate Travel Demand Models, Arnim H. Meyburg and Peter R. Stopher, TE2:May 75:237:11299
Air Quality Management through Land-Use Measures, Ronald A. Venezia, UP1:Aug 76:95:12350
Automated Ground Transportation System Stations with Multiple Loading Positions, Dietrich R. Bergmann, TE2:May 75:383:11328
Automobile Energy Requirements, Eric Hirst, TE4:Nov 74:815:10909
Bicycles and Traffic, Harold C. Munn, TE4:Nov 75:753:11729
Community Role in Modal Choice for Transit System Planning, Robert E. Paaswell and Janice Pafka-Gerbig, UP1:May 75:35:11305
Computer-Aided Design of Urban Transit Systems, Jerry B. Schneider, Claus D. Gehner, Dennis Porter and James Clark, TE4:Nov 74:943:10936
Concrete Applications in Transportation Construction (1891-1976), Gordon K. Ray, Preprint No.2745, Sept 76, 29pp.
The Current Status of Transportation Control Plans, Gary Hawthorn, BP75:Dec 75:557
Economic and Social Issues of Our Cities, Phillip Hammer, UP1:Aug 76:69:12354
Economic Evaluation Techniques for Bicycle-Pedestrian Systems: A Case Study, Jack Dorman and Michael Everett, BP75:Dec 75:454
Economic Measure of Benefits of Transportation, John F. Brotchie, TE1:Feb 76:17:11888
Energy Conservation in Transportation, CE:Feb 76:24
Energy-Intensive Analysis of Truck Transportation, Balakrishnamurthy Ashtakala, TE2:May 75:225:11289
Engineering the First Mass Transit Tramway, Richard L. Tomasetti and David I. Ozerkis, CE:Nov 75:65
Evaluating Multi-Modal Alternatives: San Diego/Los Angeles Corridor Study, Darwin G. Stuart, Preprint No.2666, Apr 76, 29pp.
The Evolution of Urban Transportation, CE:July 76:75
Future of Highways, Fiscal Constraints, Srikanth Rao, Thomas D. Larson and Theodore H. Poister, Preprint No.2768, Sept 76, 24pp.
Gate-Arrival Terminals—Solution for Air Cargo?, Francis Chin, Richard de Neufville and Jorge Rebelo, TE1:Feb 76:47:11890
Greater Lawrence Transportation Improvements Study, Maurice Freedman, Preprint No.2763, Sept 76, 30pp.
Improving Downtown Circulation and Environment — Bring Back the Trolley Bus?, Walter Kudlick, Preprint No.2810, Sept 76, 12pp.
Intercity Systems, Jerry D. Ward, Preprint No.2769, Sept 76, 17pp.
Los Angeles Pioneers Separate Busway, Richard C. Gallagher, CE:Jan 75:64
Method for Designing Airport Terminal Concepts, John P. Braaksma and John H. Shortreed, TE2:May 75:321:11308
Multilane Passenger Conveyors, Edward W. Walbridge, TE3:Aug 75:463:11485
Optimum Size of Hauling Units, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:853:11771
"Para-Transit: Neglected Options for Urban Mobility," by Ronald F. Kirby, et al. (Book Review), Lester A. Hoel, CE:July 76:38
Planning Criteria for Bikeways, Vincent R. Desimone, TE3:Aug 73:609:9928
Predicting Demand for Engineered Facilities, James P. Romualdi, EI3:July 75:365:11426
Progress in Signaling for Track Guided Systems, Alastair D. McAulay, TE4:Nov 75:621:11695
Propensity of Statewide Multimodel Transportation, William D. Klink and Jason C. Yu, TE4:Nov 75:639:11710
Reserved Bus Lanes in Dallas, Texas, Mildred Cox, TE4:Nov 75:691:11720
Rutting Failure in Full-Depth Asphalt Pavement, Jacob Greenstein and Moshe Livneh, TE4:Nov 75:737:11690
Scope of Socio-Economics Considerations, E. J. Schmidt, EFEEC:Aug 75:272
Transportation for the 1980's and Its Effect on Energy, the Economy and the Environment, James T. Sullivan, Preprint No.2816, Sept 76, 4pp.
Trip Production Forecasting Models for Urban Areas, William J. Fogarty, TE4:Nov 76:831:12557
Two Means of Alleviating Rush-Hour Crowding, Charles Libove, TE4:Nov 73:845:10144
Use of Remote Sensing for Mapping Wetlands, Robert J. Reimold and Rick A. Linthurst, TE2:May 75:189:11293

Transportation Management
The Wrong Way Is Sometimes the Right Way, Marshall Suloway, TE4:Nov 76:617:12518

Transportation Models
Competition in the Transportation Industry, Dayle M. Clark and James J. Schwarzwalder, TE3:Aug 76:489:12290
Urban Travel Demand Models with Competitive Modes, Paul J. Ossenbruggen and Alex Li, TE3:Aug 76:585:12314

Transportation Planning
Chicago Urban Transportation Planning, Harold E. Nelson and William L. Barnes, Preprint No.2815, Sept 76, 27pp.
Community Role in Modal Choice for Transit System Planning, Robert E. Paaswell and Janice Pafka-Gerbig, UP1:May 75:35:11305
The Current Status of Transportation Control Plans, Gary Hawthorn, BP75:Dec 75:557
Desperate Need to Slash Construction Cost of New Subways, Eugene E. Dallaire, CE:Dec 76:37
The Engineering and Minority Community in Symbiosis, Sol E. Cooper, EI2:Apr 76:217:12078
Evaluating Multi-Modal Alternatives: San Diego/Los Angeles Corridor Study, Darwin G. Stuart, Preprint No.2666, Apr 76, 29pp.
Improving Downtown Circulation and Environment — Bring Back the Trolley Bus?, Walter Kudlick, Preprint No.2810, Sept 76, 12pp.
Mode Choice Estimation for Small Areas, Arun Chatterjee and Kumares C. Sinha, TE2:May 75:265:11303
Public Acceptance of New Mass Transit System, Roger B. Trent and Cooper N. Redwine, UP1:Aug 76:225:12361

Transportation Studies
Benefits of Separating Pedestrians and Vehicles, Ronald L. Braun and Marc F. Roddin, BP75:Dec 75:406

Transportation System Capacities
Marine Alternatives for Rapid Transit in Hawaii, Theodore T. Lee, WW76:Aug 76:107

Transportation Systems
Carpools at Large Suburban Technical Center, Robert Herman and Tenny Lam, TE2:May 75:311:11332
Ecological Considerations in Transportation Systems, Beatrice E. Willard, EI3:July 75:329:11454
Marine Alternatives for Rapid Transit in Hawaii, Theodore T. Lee, WW76:Aug 76:107
"Para-Transit: Neglected Options for Urban Mobility," by Ronald F. Kirby, et al. (Book Review), Lester A. Hoel, CE:July 76:38
Strategies for Alleviating Impact of Aircraft Noise, Adib Kanafani and Abdullah Mogharabi, TE4:Nov 75:657:11715

Transport Phenomena
Transport Phenomena Applied to Sludge Dewatering, Peter Kos and Donald Dean Adrian, EE6:Dec 75:947:11781

Transverse Strength
Irregular Supports and Skew Diaphragms of Box Girders, Vladimir Kristek, ST5:May 74:917:10541

Transverse Waves
Transverse Forces on Vertical Cylinders in Waves, Michael de St. Q. Isaacson and David J. Maull, WW1:Feb 76:49:11934

Trashracks
Experimental Methods and Instrumentation for Power Generation Structures — Some Case Studies, Joseph W. Fortey and Raymond R. Funk, Preprint No.2717, Apr 76, 25pp.

Travel Demand
Aggregate and Disaggregate Travel Demand Models, Arnim H. Meyburg and Peter R. Stopher, TE2:May 75:237:11299
Demand Model for Bus Network Design, Jende Hsu and Vasant H. Surti, TE3:Aug 76:451:12309
Evaluation of Long-Range Transit Alternatives, Walter Cherwony and Lewis Polin, TE2:May 75:199:11282
Urban Travel Demand Models with Competitive Modes, Paul J. Ossenbruggen and Alex Li, TE3:Aug 76:585:12314

Traveling Waves
Applications of Integral Equation Method to Some Geomechanical Problems, Yoshiji Niwa, Shoichi Kobayashi and Takuo Fukui, NMG:June 76:I-120
Numerical Solution of Boussinesq Equation, Sita Ram Singh and C. M. Jacob, EM5:Oct 76:807:12463

Travel Modes
Case Study of Carless Mobility Constraints, K. C. Koutsopoulos and Vasant H. Surti, TE4:Nov 76:745:12566
Evaluation of Long-Range Transit Alternatives, Walter Cherwony and Lewis Polin, TE2:May 75:199:11282

Travel Patterns
Evaluation of Long-Range Transit Alternatives, Walter Cherwony and Lewis Polin, TE2:May 75:199:11282

Trenching
OSHA Trenching and Shoring Standards, George E. Mason and Steven Shimp, CO2:June 75:377:11377

Trends
Land-Use and Growth Management—A Comment for Professionals, Randall Scott, UP1:Aug 76:73:12359

Triangulation
Corner Restoration in Missouri, Norman L. Brown, SU1:Oct 75:101:11658
Image Error and Photogrammetric Requirements, G. Warren Marks, SU1:Dec 76:39:12607
New Adjustment of North American Datum and Surveyor, John D. Bossler, William E. Stephens, James R. Plasker, Wesley V. Hull and Douglas R. Lee, SU1:Oct 75:115:11657

Triaxial Compression
Stress-Strain Properties of Compacted Clays, David E. Daniel and Roy E. Olson, GT10:Oct 74:1123:10869

Triaxial Tests
Acoustic Emission Behavior of Granular Soils, Robert M. Koerner, Arthur E. Lord, Jr., W. Martin McCabe and John W. Curran, GT7:July 76:761:12239
Analysis of a Test Embankment Considering the Anisotropy of the Soil, Hakan Stille, A. Fredriksson and Bengt B. Broms, NMG:June 76:II-611
Analysis of Shear-Induced Anisotropy in Leda Clay, K. T. Law and Kwan Y. Lo, NMG:June 76:I-329
A Constitutive Equation for Normally Consolidated Clays, Toshihisa Adachi, NMG:June 76:I-282
Cyclic Triaxial Strength of Standard Test Sand, Marshall L. Silver, Clarence K. Chan, Richard S. Ladd, Kenneth L. Lee, Drew A. Tiedemann, Frank C. Townsend, Julio E. Valera and James H. Wilson, GT5:May 76:511:12145
Dynamic Triaxial and Simple Shear Behavior of Sand, Ted K. Park and Marshall L. Silver, GT6:June 75:513:11347
Elastoplastic Stress-Strain Theory for Cohesionless Soil, Poul V. Lade and James M. Duncan, GT10:Oct 75:1037:11670
FE Analysis of Soil Movements Below a Test Embankment, Toru Shibata, Masanari Tominaga and Hajime Matsuoka, NMG:June 76:II-599
Fracture and Stress-Strain Relationship of Concrete Under Triaxial Compression, Ranga Palaniswamy and Surendra P. Shah, ST5:May 74:901:10547
Incremental Stress-Strain Relationship for Cohesionless Soil, F. Darve, S. Labanieh and R. Chambon, NMG:June 76:I-264
In-Situ Pore Presure Measurements at Rio Blanco, John R. Banister, Robert Pyke, D. Maxwell Ellett and Leon Winters, GT10:Oct 76:1073:12471
Method of Calculating Long-Term Creep Settlements, Harry G. Poulos, Laurence P. de Ambrosis and Edward H. Davis, GT7:July 76:787:12273

On Load Tests in Soft Clays, Bernd R. Thamm, NMG:June 76:I-557
Predicting Deformation in the Fort Union Formation, Van A. Silver, Samuel P. Clemence and Richard W. Stephenson, GT76:Aug 76:13
Response of Footings on Micaceous, Cohesionless Soils, Jean M.E. Audibert, Nabil F. Ismael and G. Wayne Clough, NMG:June 76:I-567
Sand Liquefaction in Large-Scale Simple Shear Tests, Pedro De Alba, H. Bolton Seed and Clarence K. Chan, GT9:Sept 76:909:12403
Saturated Sand and Cyclic Dynamic Tests, Y. Cho, Paul C. Rizzo and Wilfred K. Humphries, Preprint No.2752, Sept 76, 28pp.
Shear Strength of Soils and Cyclic Loading, Gonzalo Castro Salas and John T. Christian, GT9:Sept 76: 887:12387
Significance of Variably Confined Triaxial Testing, John J. Allen and Marshall R. Thompson, TE4:Nov 74:827:10911
Strain Rate Behavior of Compacted Silt, Nikhilesh Roy and Parth Sarathi, GT4:Apr 76:347:12024
Stress-Path Dependent Deformation Moduli of Clay, Yudhbir and A. Varadarajan, GT3:Mar 75:315: 11198
Stress-Path Independent Behavior of Cohesionless Soil, Poul V. Lade and James M. Duncan, GT1:Jan 76:51:11841
Stress-Strain Behavior of Soft Bangkok Clay, A. S. Balasubramaniam and A. R. Chaudhry, NMG:June 76:I-390
Stress-Strain Properties of Compacted Clays, David E. Daniel and Roy E. Olson, GT10:Oct 74:1123: 10869
Testing Procedure Effects on Dynamic Soil Behavior, Marshall L. Silver and Ted K. Park, GT10:Oct 75: 1061:11671
Undrained Volume Changes in Compacted Cohesive Soil, James L. Withiam and Fred H. Kulhawy, GT10:Oct 76:1029:12483

Trickling Filters
Design Optimization for Biological Filter Models, Harold B. Gotaas and William S. Galler, EE6:Dec 73:831:10191
Slime Holdup, Influent BOD, and Mass Transfer in Trickling Filters, Bernard Atkinson and John A. Howell, EE4:Aug 75:585:11505
Stochastic Analysis of Trickling Filter, Khurshed J. Mistry and David M. Himmelblau, EE3:June 75: 333:11362
Trickling Filter-Activated Sludge Combinations, Robert F. Roskopf, James C. Young and E. Robert Baumann, EE5:Oct 76:1005:12460

Trip Distribution Models
Carpools at Large Suburban Technical Center, Robert Herman and Tenny Lam, TE2:May 75:311:11332

Trip Forecasting
National Highway Travel Forecasts, Gary E. Maring, TE4:Nov 76:759:12558
Trip Production Forecasting Models for Urban Areas, William J. Fogarty, TE4:Nov 76:831:12557

Trip Length
Bicycle Facility Design Considerations: A Summary, John E. Baerwald, BP75:Dec 75:259
Minimum Cost in Residential Refuse Vehicle Routes, Jon C. Liebman, James W. Male and Magne Wathne, EE3:June 75:399:11368
Traffic Generation from Land Development Proposals, Satish C. Sharma and Afifi H. Soliman, TE2:May 76:243:12153
Transportation Energy Considerations, Alexander French, TE1:Feb 76:27:11919

Trip Time
Carpools at Large Suburban Technical Center, Robert Herman and Tenny Lam, TE2:May 75:311:11332

Tropical Cyclones
Predicting Wind-Induced Response in Hurricane Zones, Bjarni V. Tryggvason, David Surry and Alan G. Davenport, ST12:Dec 76:2333:12630

Trucking Industry
Apparel-Goods Movement Process, Sam Kahan, Carl M. Berkowitz and Walter H. Kraft, TE3:Aug 76: 507:12298
Energy-Intensive Analysis of Truck Transportation, Balakrishnamurthy Ashtakala, TE2:May 75:225: 11289

Truncation Errors
Truncation Error Control in Generalized Finite Element Method, Martin J. Wyatt, Gwynne Davies and Cyril Snell, TN: EM4:Aug 76:736:12286

Trusses
A Brief History of the Steel Joist Industry, Robert C. Macomber, Preprint No.2758, Sept 76, 12pp.
Computer Modeling and Testing of Timber Trusses for Design Instruction, Louis H. Klotz, Preprint No.2737, Sept 76, 30pp.
Deflection and Ponding of Steel Joists, R. Richard Avent, ST7:July 76:1399:12241
Efficient Design-Analysis of Physically Nonlinear Trusses, Edwin C. Rossow, David L.C. Lo and Shih-Lung Chu, ST4:Apr 75:839:11257
Iterative Design for Optimal Geometry, William R. Spillers, ST7:July 75:1435:11439
Lateral Stability of Cable Truss, H. Max Irvine and Paul C. Jennings, EM4:Aug 75:403:11519
Lateral Stability of Plane Open-Web Structures, P. C. Varghese, ST11:Nov 74:2223:10924
Nonlinear Analysis of Reticulated Space Trusses, Dharapuram S. Jagannathan, Howard I. Epstein and Paul P. Christiano, ST12:Dec 75:2641:11799
Optimization in Trusses Using Optimal Control Theory, Narasingam M. Singaraj and Jawalker K. Sridhar Rao, ST5:May 75:1037:11304
Space Trusses with Brittle-Type Strut Buckling, Lewis C. Schmidt, Peter R. Morgan and John A. Clarkson, ST7:July 76:1479:12274
Statics and Dynamics of Cable Trusses, H. Max Irvine, EM4:Aug 75:429:11506
Ultimate Load Test of Truss Bridge Floor System, Wallace W. Sanders, Jr., F. Wayne Klaiber, Hotten A. Elleby and Leonard W. Timm, ST7:July 76: 1383:12247
Variable Energy Ratio Method for Structural Design, James W. Gorzynski and William A. Thornton, ST4:Apr 75:973:11266
Wake Study of Stiffening Truss and Box Girder, Timothy A. Reinhold, Henry W. Tieleman and Francis J. Maher, ST9:Sept 76:1643:12372
Weight Optimization of Plane Trusses, Samuel L. Lipson and Krishna M. Agrawal, ST5:May 74:865: 10521

Tsunamis
Conditional Expected Tsunami Inundation for Hawaii, Wm. Mansfield Adams, WW4:Nov 75:319: 11702
Design Basis Flooding at Offshore Reactor Sites, Ronald M. Noble, OE75:June 75:89

Tubes
Bending Strength of Rectangular Hallow Sections, Ray R. Ayers, James M. Nash and William J. Graff, ST76:Aug 76:439
Circular Steel Tubes in Bending, Donald R. Sherman, Preprint No.2694, Apr 76, 27pp.
Local Buckling of Tubular Steel Columns, Alexis Ostapenko and Stephen X. Gunzelman, ST76:Aug 76:549
Recent Japanese Developments in Mixed Structures, Minoru Wakabayashi, ST76:Aug 76:497
Ultimate Strength of Tubular Beam-Columns, A. L. Wagner, W. H. Mueller and Hacik Erzurumlu, Preprint No.2695, Apr 76, 25pp.

Tunnel Construction
Fifty-Year Highlights of Tunneling Equipment, David A. Day and Bradford P. Boisen, CO2:June 75:265: 11393
Karl Terzaghi and the Chicago Subway, Ralph B. Peck, EI4:Oct 75:477:11668
Liner-Medium Interaction in Tunnels, Bijan Mohraz, Alfred J. Hendron, Jr., Randall E. Ranken and Mohammad H. Salem, CO1:Mar 75:127:11174
Model Study of Tunnel Prereinforcement, Gregory E. Korbin and Tor L. Brekke, GT9:Sept 76:895:12415
Tunnel and Shaft Sealing Methods Using Polyvinyl Chloride Sheet, Antonio Peduzzi, CO1:Mar 76:111: 11966
Tunnel under Alps Uses New, Cost-Saving Lining Method, Ladislaus v. Rabcewicz, CE:Oct 75:66
Washington Metro: Our National Model, Robert S. O'Neil and Edmund A. Fairhead, CE:Sept 76:70

Tunnel Design
Are Contractors Treated Fairly?, George A. Fox and Max E. Greenberg, CE:May 75:56
An Engineer Rebuts a Contractor's Charges of Unfair Contracts, Sidney Zecher, CE:Oct 75:75
Ventilated Approach Regions for Railway Tunnels, Alan E. Vardy, TE4:Nov 75:609:11691

Tunneling
Landmarks Attest CE Contribution to Progress, CE: Aug 76:76
Subsidence Over Soft Ground Tunnel, Roger A. Butler and Delon Hampton, GT1:Jan 75:35:11074
Urban Tunnels—An Option for the Transit Crisis, Matt S. Walton and Richard J. Proctor, TE4:Nov 76:715:12532

Tunneling (Excavation)
Applications of Integral Equation Method to Some Geomechanical Problems, Yoshiji Niwa, Shoichi Kobayashi and Takuo Fukui, NMG:June 76:I-120
Are Contractors Treated Fairly?, George A. Fox and Max E. Greenberg, CE:May 75:56
Austin's 11-Mile Sewer Tunnel Reflects Sound Economic, Environmental Alternatives, Albert M. Eldridge, CE:Aug 76:52
Design of Transit Structures for Urban Areas, David G. Hammond and Drupad B. Desai, TE1:Feb 76:1: 11918
Developments in Trench-Type Tunnel Construction, Wayne F. Palmer and Kenneth C. Roberts, CO1: Mar 75:37:11183
An Engineer Rebuts a Contractor's Charges of Unfair Contracts, Sidney Zecher, CE:Oct 75:75
Half a Century Progress in Soft Ground Tunneling, George A. Fox and Louis E. Nicolau, CO4:Dec 76: 637:12622
Importance of Groove Spacing in Tunnel Boring Machine Operations, Parviz F. Rad, GT9:Sept 75: 949:11589
An Introduction to Fifty Years of Tunneling, Robert S. Mayo, CO2:June 75:259:11348
Karl Terzaghi and the Chicago Subway, Ralph B. Peck, EI4:Oct 75:477:11668
A Numerical Analysis of the Maximum Earth Pressure Acting on Tunnel Lining, Shunsuke Sakurai and Yoshiaki Yamamoto, NMG:June 76:II-821
On the Distribution of Stress Around a Circular Tunnel Under Internal Pressure in Gravitating Plastic Ground with Frictional Resistance, Eiichi Oda and Takuo Yamagami, NMG:June 76:II-847
Parametric Studies as a Design Aid in Tunneling, K. Kovari, H. Hagedorn and P. Fritz, NMG:June 76: II-773
Simulation Model for Tunnel Construction Costs, Fred Moavenzadeh and Michael J. Markow, CO1: Mar 76:51:11967
Stress and Stability Analyses of Underground Openings Taking Post-Failure Behavior of Rock into Consideration, T. Kawamoto and T. Saito, NMG:June 76:II-791
Stresses in Shallow Elliptical Tunnel, Robert Mark, TN: GT11:Nov 76:1187:12513
Three-Dimensional FE Analysis of a Room and Pillar Coal Mine (A Comparison with Experiment), Robert T. Langland, NMG:June 76:II-802
Tunnel and Shaft Sealing Methods Using Polyvinyl Chloride Sheet, Antonio Peduzzi, CO1:Mar 76:111: 11966
Tunnel Survey and Tunneling Machine Control, Edward W. Peterson and Peter Frobenius, SU1:Sept 73:21:10008
Unique Team Effort on Washington Subway Project, Delon Hampton and David Novick, EI1:Jan 76: 129:11872
Urban Tunnels—An Option for the Transit Crisis, Matt S. Walton and Richard J. Proctor, TE4:Nov 76:715:12532
Washington, D.C. Mall Tunnel, Allan B. MacPherson and Philip E. Egilsrud, CE:Feb 75:64
3-D Stability Analysis of Tunnels in Jointed Rock, Walter Wittke and Bernd Pierau, NMG:June 76:III-1401

Tunneling Machines
Fifty-Year Highlights of Tunneling Equipment, David A. Day and Bradford P. Boisen, CO2:June 75:265: 11393

Tunnel Linings
Liner-Medium Interaction in Tunnels, Bijan Mohraz, Alfred J. Hendron, Jr., Randall E. Ranken and Mohammad H. Salem, CO1:Mar 75:127:11174
A Numerical Analysis of the Maximum Earth Pressure Acting on Tunnel Lining, Shunsuke Sakurai and Yoshiaki Yamamoto, NMG:June 76:II-821
Tunnel and Shaft Sealing Methods Using Polyvinyl Chloride Sheet, Antonio Peduzzi, CO1:Mar 76:111: 11966
Tunnel under Alps Uses New, Cost-Saving Lining Method, Ladislaus v. Rabcewicz, CE:Oct 75:66

Tunnels
Analysis of Buried Pipe Under Embankment, Shamsher Prakash, Gyan C. Nayak and R. Gupta, NMG:June 76:II-886
Applications of Integral Equation Method to Some Geomechanical Problems, Yoshiji Niwa, Shoichi Kobayashi and Takuo Fukui, NMG:June 76:I-120
Applications of Photoelasticity to Structural Analysis, J. F. Jullien, R. Duhau and J. C. Cubaud, EM5:Oct 76:867:12486
Austin's 11-Mile Sewer Tunnel Reflects Sound Economic, Environmental Alternatives, Albert M. Eldridge, CE:Aug 76:52
Developments in Trench-Type Tunnel Construction, Wayne F. Palmer and Kenneth C. Roberts, CO1: Mar 75:37:11183
Field Test Sections Save Cost in Tunnel Support, Kenneth S. Lane, FTTC:Oct 75
Finite Element Study of a Shallow Tunnel in Rock Exhibiting Clay-Induced Anisotropy, C. F. Lee and Kwan Y. Lo, NMG:June 76:II-834
Half a Century Progress in Soft Ground Tunneling, George A. Fox and Louis E. Nicolau, CO4:Dec 76: 637:12622
An Introduction to Fifty Years of Tunneling, Robert S. Mayo, CO2:June 75:259:11348
Liner-Medium Interaction in Tunnels, Bijan Mohraz, Alfred J. Hendron, Jr., Randall E. Ranken and Mohammad H. Salem, CO1:Mar 75:127:11174
A Numerical Analysis of the Maximum Earth Pressure Acting on Tunnel Lining, Shunsuke Sakurai and Yoshiaki Yamamoto, NMG:June 76:II-821
Parametric Studies as a Design Aid in Tunneling, K. Kovari, H. Hagedorn and P. Fritz, NMG:June 76: II-773
Past and Future of Construction Equipment — Part I, Franklin J. Larkin and Stuart Wood, Jr., CO2: June 75:309:11391
Simulation Model for Tunnel Construction Costs, Fred Moavenzadeh and Michael J. Markow, CO1: Mar 76:51:11967

Stress and Stability Analyses of Underground Openings Taking Post-Failure Behavior of Rock into Consideration, T. Kawamoto and T. Saito, NMG:June 76:II-791
Stresses in Shallow Elliptical Tunnel, Robert Mark, TN: GT11:Nov 76:1187:12513
Stresses on Shallow Circular Pipe by Transformed Section, Rowland Richards, Jr. and Jagdish S. Agrawal, GT6:June 74:637:10631

Tunnel Supports
Field Test Sections Save Cost in Tunnel Support, Kenneth S. Lane, FTTC:Oct 75

Turbidity
Dredge-Fill in the Coral Reef Tract of the Northern Florida Keys, George M. Griffin, DIEE:Jan 76:768
Impact of Dredging on Water Quality in Grays Harbor, Washington, John M. Smith, James B. Phipps, Eugene B. Schermer and Don F. Samuelson, DIEE:Jan 76:512
Laboratory Study of the Turbidity Generation Potential of Clay Mixtures, David R. Cogley, Barry A. Wechsler and Ralph D'Agostino, DIEE:Jan 76:964
Predicting and Controlling Turbidity Around Dredging and Disposal Operations, William D. Barnard, DIEE:Jan 76:930
Satellite Measurements of Turbidity of Coastal Waters, Edward Yost, OE75:June 75:1170
Sediment Control during Highway Construction in Central Pennsylvania, Lloyd A. Reed, IR76:July 76:497
Silt Curtains for Dredging Turbidity Control, Edward E. Johanson, DIEE:Jan 76:990
Turbidity-Suspended Solids in Channel Construction, James L. Hunt and John J. Mank, Preprint No.2794, Sept 76, 15pp.

Turbine Efficiency
Runner Diameter of Tubular Turbines, Ekkehard Heinemann, Klaus-Dieter Kraft and Gerhard Rouve, PO1:Jan 76:53:11833

Turbine Runners
Runner Diameter of Tubular Turbines, Ekkehard Heinemann, Klaus-Dieter Kraft and Gerhard Rouve, PO1:Jan 76:53:11833

Turbines
Construction of Grand Coulee Third Power Plant, Donald J. Duck, CO4:Dec 75:869:11774
Discharge Computations at River Control Structures, Dannie L. Collins, HY7:July 76:845:12237
Large Flexible Turbine Foundations, Amin M. Almuti, T76:Aug 76:707
Natural Frequencies of a Turbine Foundation, Chung-Tung Shen and Norman E. Stone, STN75:Dec 75:II-302
Runner Diameter of Tubular Turbines, Ekkehard Heinemann, Klaus-Dieter Kraft and Gerhard Rouve, PO1:Jan 76:53:11833
Start-Up Performance, Hyatt-Thermalito Power Complex, Haywood G. Dewey, Jr., Robert W. Ehrhart and William H. Young, PO2:Nov 73:405:10169
Thermodynamic Models of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:1:11829

Turbogenerators
Nuclear Turbine-Generator Foundation Model Tests, Ish K. Aneja and Brian W. Dimmick, Preprint No.2704, Apr 76, 30pp.

Turbulence
Cladding and the Wind, Keith J. Eaton, ST5:May 76:1043:12114
Coastal Dispersion of Pollutants, Ryszard B. Zeidler, WW2:May 76:235:12121
Convective Model of Longitudinal Dispersion, Raul S. McQuivey and Thomas N. Keefer, HY10:Oct 76:1409:12478
Dispersion—Mississippi River Below Baton Rouge, La., Raul S. McQuivey and Thomas N. Keefer, HY10:Oct 76:1425:12490
Evaluation of Circulation in Estuaries, Karim A. Abood and Efstathios L. Bourodimos, HY9:Sept 76:1211:12408
Experimental Study of Turbulent Stratified Shearing Flow, Vincent H. Chu and Madanlal R. Vanvari, HY6:June 76:691:12205
Explicit Working for Turbulent Pipe Flow Problems, David I.H. Barr, TN: HY5:May 76:667:12129
Flow Visualization in Free Shear Layers, Joseph A. Clark and Eric Markland, HY11:Nov 73:1897:10119
Impinging Circular Turbulent Jets, Spyridon Beltaos and Nallamuthu Rajaratnam, HY10:Oct 74:1313:10852
Mean Energy in Gradually Diverging Flow, Alan F. Babb and Jaime Amorocho, HY5:May 76:581:12097
Measurements of Estuary Dispersion Coefficients, Peter R.B. Ward, TN: EE4:Aug 76:855:12285
A Numerical Model of the Time-Dependent, Three-Dimensional Structure of Circulation in Large Lakes, Ralph Ta-shun Cheng, Preprint No.2692, Apr 76, 27pp.
Point Source Dispersion in Turbulent Open Channels, Kemal M. Atesmen, HY7:July 75:789:11413
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, Preprint No.2687, Apr 76, 28pp.
Resonance Phenomena Due to Turbulent Boundary Layer Excitation of Elastic Surfaces, Robert L. Ash and R. Balasubramanian, Preprint No.2726, Apr 76, 28pp.
Response to Stochastic Wind of N-Degree Tall Buildings, William E. Saul, P. Jayachandran and Alain H. Peyrot, ST5:May 76:1059:12112
Role of Eddy Diffusivity in Thermocline Formation, Brian Henderson-Sellers, EE3:June 76:517:12174
Submerged Buoyant Jets in Quiscent Fluids, Daniel T.L. Chan and John F. Kennedy, HY6:June 75:733:11383
Turbulent Flow of Power-Law Fluids, Abdul I.Y. Mohammed, Narendra N. Gunaji and Phillip R. Smith, HY7:July 75:885:11459
Turbulent Structure near Smooth Boundary, Paul H. Blinco and Daryl B. Simons, EM3:June 75:241:11372
Velocities Above Rough Bed in Oscillatory Flow, John F.A. Sleath, WW4:Nov 74:287:10930
Wall Jet Analogy to Hydraulic Jump, Rangaswami Narayanan, HY3:Mar 75:347:11172

Turbulent Diffusion
Some Features of Wind Action on Shallow Lakes, Robert B. Banks, EE5:Oct 75:813:11640

Turbulent Flow
Effects of Turbulence on Bridge Model Torsional Stability, Timothy A. Reinhold, Henry W. Tieleman and Francis J. Maher, ST5:May 76:1603:12118
Entrainment and Drag Forces of Deflected Jets, Daniel T.-L. Chan, Jung-Tai Lin and John F. Kennedy, HY5:May 76:615:12141
Flow in Corrugated Pipes, Robert J. Shipton and Harald R. Graze, HY9:Sept 76:1343:12414
Impinging Circular Turbulent Jets, Spyridon Beltaos and Nallamuthu Rajaratnam, HY10:Oct 74:1313:10852
Mean Energy in Gradually Diverging Flow, Alan F. Babb and Jaime Amorocho, HY5:May 76:581:12097
Oblique Impingement of Plane Turbulent Jets, Spyridon Beltaos, HY9:Sept 76:1177:12388
Resistance Equation for Alluvial-Channel Flow, Durl E. Burkham and David R. Dawdy, HY10:Oct 76:1479:12462
Turbulent Flow of Power-Law Fluids, Abdul I.Y. Mohammed, Narendra N. Gunaji and Phillip R. Smith, HY7:July 75:885:11459

Wake Study of Stiffening Truss and Box Girder, Timothy A. Reinhold, Henry W. Tieleman and Francis J. Maher, ST9:Sept 76:1643:12372

Turkey
Environmental Design for Istanbul Sewage Disposal, Charles G. Gunnerson, EE1:Feb 74:101:10343

Twisting
Kink Formation and Rotational Response of Single and Multistrand Electromechanical Cables, Francis C. Liu, OE75:June 75:546

Two-Dimensional
End Effects in Long Curved Beam, Bellur S. Ramachandra Rao, S. Gopalacharayulu and N. B. Shukla, EM1:Feb 76:19:11920
Steady Stratified Circulation in a Cavity, Der-Liang Young, James A. Liggett and Richard H. Gallagher, EM1:Feb 76:1:11903
Two-Dimensional Logit Modal Split Model, Walter Cherwony and Jerome Lutin, TE3:Aug 76:525:12299

Two Phase Flow
Interaction of Multiple Jets with Ambient Current, Ralph R. Boericke, HY4:Apr 75:357:11247
Optimization of Denitrification Process, Richard P. Michael and William J. Jewell, EE4:Aug 75:643:11532
Wall Shear Measurment in Sand-Water Mixture Flows, Oner Yucel and Walter H. Graf, HY7:July 75:947:11453

T.Y. Lin Award
1976 T.Y. Lin Award Presented to Walter H. Dilger, Amin Ghali and Maher K. Tadros, CE:Oct 76:97

Typhoons
Loadings and Codes for Typhoon Resistant Design, Hatsuo Ishizaki, ST10:Oct 76:2073:12496

Ultimate Loads
Effective Composite Beam Width at Ultimate Load, Conrad P. Heins and Horn Ming Fan, ST11:Nov 76:2163:12538
Ferrocement Load-Bearing Wall Elements, Prakash Desayi and Arun D. Joshi, ST9:Sept 76:1903:12420
Inelastic Stability of Beams under Biaxial Bending, Chesada Kasemset, Fumio Nishino and Seng-Lip Lee, EM5:Oct 74:965:10881
Load Factor Design of Continuous-Span Bridges, Conrad P. Heins and Alan D. Kurzweil, ST6:June 76:1213:12219

Ultimate Strength
Holding Capacity of Direct Embedment Anchors, Richard M. Beard and Homa J. Lee, OE75:June 75:470
Multistory Frame Design Using Story Stiffness Concept, Francois Cheong Siat Moy, ST6:June 76:1197:12221
State-of-the-Art Report on Ultimate Strength of I-Beam Bridge Systems, Conrad P. Heins, Chmn., ST5:May 75:1085:11323
Ultimate Strength of Tubular Beam-Columns, A. L. Wagner, W. H. Mueller and Hacik Erzurumlu, Preprint No.2695, Apr 76, 25pp.

Ultimate Strength Design
Analysis of Reinforced Fibrous Concrete Beams, Charles H. Henager and Terrence J. Doherty, ST1:Jan 76:177:11847
Ultimate Strength of Continuous Composite Beams, Sumio Hamada and Jack Longworth, ST7:July 76:1463:12267

Ultimate Strength Method
Concrete L-Beams Subject to Combined Torsional Loads, D. Wayne Kirk and David G. McIntosh, ST1:Jan 75:269:11064

Ultrasonic Devices
Collapsible Soils, John P. Bara, Preprint No.2797, Sept 76, 12pp.

Ultrasonic Tests
In-Place Evaluation of Concrete, V. Mohan Malhotra, CO2:June 75:345:11354
Past and Future of Concrete Quality Control, Venkataswamy Ramakrishnan, CO2:June 76:263:12187

Uncertainty Principle
Bayesian Approach to Tile Drain Design, Andre Musy and Lucien Duckstein, IR3:Sept 76:317:12390
Optimal Activated Sludge Design under Uncertainty, Arthur R. Tarrer, C. P. Leslie Grady, Jr., Henry C. Lim and Lowell B. Koppel, EE3:June 76:657:12207
A Probabilistic Design Approach Using the Palmgren-Miner Hypothesis, Paul H. Wirsching and James T.P. Yao, ST76:Aug 76:324
Uncertainties in Soil Structure Interaction, John T. Christian, STN75:Dec 75:II-105

Unconfined Compression
Effect of Catalyst in Soil-Resin Stabilization, Dalim K. Majumdar, GT6:June 75:531:11385

Undergraduate Study
Computer Modeling and Testing of Timber Trusses for Design Instruction, Louis H. Klotz, Preprint No.2737, Sept 76, 30pp.
FAR — A Self-Teaching Frame Analysis Routine, Yehia Bahel-El-Din and Senol Utku, Preprint No.2737, Sept 76, 44pp.
A Heuristic Game for Material Selection in Structural Design Using the Hybrid Computer, Rick R. Evans, Subhash C. Anand and Myron Spector, Preprint No.2737, Sept 76, 25pp.
An Integrated Approach to Structural Engineering Education at the Undergraduate Level, Richard N. White, ST76:Aug 76:1001
Interactive Computer Design of Reinforced Concrete Beams and Columns, Melvin R. Ramey, Preprint No.2737, Sept 76
Is Undergraduate Environmental Engineering Education Desirable?, P. Walton Purdom, EE2:Apr 76:329:12039
Simulation of the Stress Computation in Shells, M. Salama and Senol Utku, Preprint No.2737, Sept 76, 32pp.
Teaching Structural Analysis and Design Using Computers, Oktay Ural, Preprint No.2737, Sept 76, 8pp.

Underground Explosions
A Comparative Study of Structural Response to Explosion-Induced Ground Motions, Neal FitzSimons, Chmn., SREGM:75, 138pp.

Underground Openings
Design Criteria for Anchor Cables and Bolting in Underground Openings, Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:II-859

Underground Storage
Oxnard-Hueneme Pipeline, Operation and Water Quality Problems, Richard A. Smith, Preprint No.2683, Apr 76, 8pp.
Subsurface Environment—Private Property or Public Domain?, William R. Walker and William E. Cox, HY11:Nov 74:1699:10958

Underground Structures
Field Test Sections Save Cost in Tunnel Support, Kenneth S. Lane, FTTC:Oct 75
A New Concept for the Relative Rigidity of Rafts, B. Ramanathan, NMG:June 76:1-489
Seismic Analysis of Underground Structural Elements, Hemant H. Shah and Shih-Lung Chu, PO1:July 74:53:10648

Three-Dimensional FE Analysis of a Room and Pillar Coal Mine (A Comparison with Experiment), Robert T. Langland, NMG:June 76:II-802

Underground Supporting
Field Test Sections Save Cost in Tunnel Support, Kenneth S. Lane, FTTC:Oct 75

Underground Surveys
An Introduction to Fifty Years of Tunneling, Robert S. Mayo, CO2:June 75:259:11348

Underpinning
Legal Aspects of Open Cut Construction, Louis Cantor, Robert A. Rubin and Eugene H. Goldberg, CO4:Dec 75:923:11767

Undersea Mineral Deposits
Undersea Exploration and Drilling, Frank C. Hess, Jr., Preprint No.2743, Sept 76, 9pp.

Undersea Surveillance
Undersea Exploration and Drilling, Frank C. Hess, Jr., Preprint No.2743, Sept 76, 9pp.

Underwater Construction
Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, Preprint No.2702, Apr 76, 30pp.
Concrete Properties at Ocean Depths, Harvey H. Haynes and Roy S. Highberg, WW4:Nov 76:455:12561
Concrete Structures for Subsea Oil Recovery — Design Considerations, Everald V. Wright and Marcel Gerbault, Preprint No.2675, Apr 76, 21pp.
Developments in Trench-Type Tunnel Construction, Wayne F. Palmer and Kenneth C. Roberts, CO1:Mar 75:37:11183
Lake Erie Airport Study — A Status Report, Herbert R. Crawford, Preprint No.2635, Apr 76, 27pp.
Recent Developments in Underwater Construction, Philip K. Rockwell, Preprint No.2669, Apr 76, 28pp.

Underwater Excavation
Hydraulic Dredges, Including Boosters, Gail G. Gren, DIEE:Jan 76:115

Underwater Foundations
Aspects of the Analysis of Gravity Offshore Structures, Ian M. Smith, NMG:June 76:II-957

Underwater Pipelines
Depth of Marine Pipeline Burial Near Shore, Melville S. Priest and Keith H. Denson, Preprint No.2636, Apr 76, 6pp.
Environmental Design for Istanbul Sewage Disposal, Charles G. Gunnerson, EE1:Feb 74:101:10343
A Fail-Safe Subaqueous Concrete Sewer, Gerald G. Emerson, CE:Sept 75:77
Forces on Many Cylinders Near a Plane Boundary, Tokuo Yamamoto and John H. Nath, Preprint No.2633, Apr 76, 19pp.
Geotechnical Input for Deep-Water Pipelines, Bing C. Yen, R. Leonard Allen and Harry H. Shatto, OE75:June 75:504
Hydrodynamic Forces on Multiple Circular Cylinders, Tokuo Yamamoto, HY9:Sept 76:1193:12395
Ju'aymah Crude Oil Loading Terminal, R. D. Lee, Preprint No.2642, Apr 76, 22pp.
Pipeline Stress Analysis, Jamal J. Azar, John G. Bomba and Verle G. Randolph, TE1:Feb 75:163:11122
Stability of Offshore Pipe in Cohesive Sediment, Osman I. Ghazzaly, Leland M. Kraft, Jr. and S. J. Lim, OE75:June 75:490
Wave Forces on Bottom-Mounted Large-Diameter Cylinder, C. J. Garrison, Frederick H. Gehrman and Brian T. Perkinson, WW4:Nov 75:343:11699

Underwater Structures
Acoustic Radiation of Submerged Vibrating Structures, Robert R. Smith and John T. Hunt, Preprint No.2711, Apr 76, 16pp.
Recent Developments in Underwater Construction, Philip K. Rockwell, Preprint No.2669, Apr 76, 28pp.
Wave Forces on a Submerged Hemispherical Shell, Robert A. Naftzger and Subrata K. Chakrabarti, OE75:June 75:959

Undrained Shear Tests
Anisotropy in Heavily Overconsolidated Kaolin, Srinath F. Amerasinghe and Richard H.G. Parry, GT12:Dec 75:1277:11808
Bearing Capacity of Offshore Gravity Structures, Surendra K. Saxena, W. M. Kilkenny and Joseph A. Fischer, OE75:June 75:450
Fundamentals of Liquefaction under Cyclic Loading, Geoffrey R. Martin, W. D. Liam Finn and H. Bolton Seed, GT5:May 75:423:11284
In-Situ Undrained Shear Strength of Two Marine Clays, Demetrious Koutsoftas and Joseph A. Fischer, GT9:Sept 76:989:12431
Undrained Stress-Strain-Time Behavior of Clays, Jean-Herve Prevost, GT12:Dec 76:1245:12644
Undrained Volume Changes in Compacted Cohesive Soil, James L. Withiam and Fred H. Kulhawy, GT10:Oct 76:1029:12483
Use of Vane Shear Test for Determining the Undrained Shear Strength of Clays, Odd S. Gregersen, GT75:June 75:II-141

Uniform Flow
Integral-Equation Analysis of Flows Over Eroding Beds, S. N. Prasad and Carlos V. Alonso, WW76:Aug 76:760

Uniformity
Uniformity among Weather Modification Laws, Ray Jay Davis, IR3:Sept 76:285:12379

Unionization
Civil Engineers and Unions in Sweden, Robert D. Holtz, CE:Nov 75:53
The Effect of Reguiations on Productivity, J. C. Turner, PROD:Aug 76:257
Highlights of San Diego Convention, CE:June 76:67
Improving Productivity in Industrial Construction, John D. Borcherding, CO4:Dec 76:599:12595
Kansas Solution to Unionism of Professionals, Bruce F. McCollum, EI3:July 76:283:12253
Motivation of Construction Workers, Craig S. Hazeltine, CO3:Sept 76:497:12376
NLRB Cancels Elections at Western Electric Facility for Separate Professional and Nonprofessional Units, CE:Jan 76:90

Union of Soviet Socialist Republics
How the Soviets Build on Permafrost, Leonard LeSchack and Reuben Kachadoorian, CE:Apr 75:57
Russia Redistributes River Flow, Norman Precoda, CE:Feb 75:72

Unions (Connectors)
Comparision of Construction Labor Agreements, Neal B.H. Benjamin and Arthur W. Young, CO1:Mar 75:183:11180

United Kingdom
Computing Education through Program Evaluation, John Y. Campbell, EI2:Apr 75:149:11240
Strength of Steel Box-Girder Bridges, Patrick J. Dowling, ST9:Sept 75:1929:11550

United States
Some Historic Bridges of the United States, Sara Ruth Watson, EI3:July 75:383:11425

Unit Hydrographs
Chow's General Hydrologic Model, Fazal H. Chaudhry, Maria A. Simoes and Walter M. Ferreira Filho, TN: HY9:Sept 76:1387:12368

Unit Hydrograph Parameters Versus Urbanization, David L. Gundlach, TN: IR3:Sept 76:388:12369

Universities
An Integrated Approach to Structural Engineering Education at the Undergraduate Level, Richard N. White, ST76:Aug 76:1001
Solid Waste Generation Rates of a University Community, Yishu Chiu, Joan Eyster and George W. Gipe, TN: EE6:Dec 76:1285:12638
Success Model for Minority Engineering Programs, Norman J. Johnson and E. Louis Overstreet, EI1: Jan 75:67:11084
The University's Role in Research Implementation, Ernest T. Smerdon, IR76:July 76:11
A Viewpoint for the Traditional Approach to Structural Engineering Education, Donald R. Sherman, 1976

Unloading
Local Unloading in Piecewise-Linear Plasticity, Osvaldo De Donato and Giulio Maier, EM3:June 76:383:12170

Unsaturated Flow
Saturated and Unsaturated Flow to Parallel Drains, R. Wayne Skaggs and Yau-K. Tang, IR2:June 76: 221:12199
Transient Drainage with Nonlinearity and Capillarity, David B. McWhorter and Harold R. Duke, IR2: June 76:193:12185

Unsteady Flow
Aquifer Parameter Identification, William Wen-Gong Yeh, HY9:Sept 75:1197:11582
Drawdown in Compressible Unconfined Aquifer, Tatiana D. Streltsova, HY11:Nov 74:1601:10950
Effects of Overbank Flow in Flood Computations, Tawatchai Tingsanchali and Norbert L. Ackermann, HY7:July 76:1013:12266
Flood Routing in Meandering Rivers with Flood Plains, Danny L. Fread, WW76:Aug 76:16
Implicit Numerical Modeling of Unsteady Flows, Michael Amein and Hsiao-Ling Chu, HY6:June 75: 717:11378
Mathematical Modelling of Rivers with Flood Plains, Miodrag Radojkovic, WW76:Aug 76:56
Movable-Bed Flow Routing in Open Channel and Its Calibration, Chian-Min Wu, WW76:Aug 76:36
One-Dimensional Temperature Predictions in Unsteady Flows, Dominque N. Brocard and Donald R.F. Harleman, HY3:Mar 76:227:11982
Simulation Accuracies of Gradually Varied Flow, J. Peter Jolly and Vujica Yevjevich, HY7:July 74: 1011:10677
Solution for Steady Open Channel Flow, Fred D. Theurer, A. H. Barnes and Everett V. Richardson, WW76:Aug 76:793
Solution for Unsteady Open Channel Flow, Fred D. Theurer, A. H. Barnes and Everett V. Richardson, WW76:Aug 76:1497
Theoretical Model of River Ice Jams, Mehmet S. Uzuner and John F. Kennedy, HY9:Sept 76:1365: 12412
Time-Reversed Unsteady Flow Computations in Waterways, Hsiao-Ling Chu, WW76:Aug 76:1535
Transient Control in Lower Sacramento River, Fred J. Gientke, HY3:Mar 74:405:10418

Uplift Piles
Uplift Capacity of Group Piles in Sand, Braja M. Das, Gerald R. Seeley and Jonathan E. Smith, TN: GT3:Mar 76:282:11953
Uplift Capacity of Model Piles Under Oblique Loads, Braja M. Das, Gerald R. Seeley and Dorairaja Raghu, TN: GT9:Sept 76:1009:12367

Uplift Pressure
Effect of Drains on Pressures Below Structures, Amrik S. Chawla, GT1:Jan 76:15:11827
Effect of Uplift on Soil-Structure Interaction and Toe Pressure Calculation, Dale R. Bervig and Chang Chen, STN75:Dec 75:II-351
Shallow Anchor Resistance to Eccentric Uplift Load, Braja M. Das and Gerald R. Seeley, TN: GT4:Apr 76:387:12019
Stability of Structures with Intermediate Filters, Amrik S. Chawla, HY2:Feb 75:223:11139
Uplift Capacity of Group Piles in Sand, Braja M. Das, Gerald R. Seeley and Jonathan E. Smith, TN: GT3:Mar 76:282:11953
Uplift Capacity of Model Piles Under Oblique Loads, Braja M. Das, Gerald R. Seeley and Dorairaja Raghu, TN: GT9:Sept 76:1009:12367

Uplift Resistance
Pullout Resistance of Horizontal Anchors, Braja M. Das and Gerald R. Seeley, OE75:June 75:434
Shallow Anchor Resistance to Eccentric Uplift Load, Braja M. Das and Gerald R. Seeley, TN: GT4:Apr 76:387:12019
Uplift Resistance of Piles in Sand, Ibrahim H. Sulaiman and Harry M. Coyle, TN: GT5:May 76: 559:12127

Uranium
Biosorption Isotherm for Uranium Recovery, Yishu Chu and James E. Zajic, TN: EE5:Oct 76:1109: 12442

Uranyl Sulfates
Yield Criterion for Reinforced Concrete Slabs, Satish C. Jain and John B. Kennedy, ST3:Mar 74:631: 10409

Urban Areas
Dimensionless Inlet Hydrograph Model, Robert M. Ragan, Morris J. Root and John F. Miller, HY9: Sept 75:1185:11580
Mode Choice Estimation for Small Areas, Arun Chatterjee and Kumares C. Sinha, TE2:May 75: 265:11303
Quantitative Assessment of Changes in Urban Runoff, Irina Cech and Karen Assaf, IR1:Mar 76: 119:11957
A Tool for Improving Social Service Delivery Systems in Urban Areas, Allen E. Shinder and Martin L. Reiss, BP75:Dec 75:366
Water Quality Aspects of Agricultural and Urban Drainage, Philip B. Bedient and William G. Characklis, IR76:July 76:374

Urban Development
Analysis and Management of Water Distribution Systems, Hubert Demard, Bernard Bobee and Jean-Pierre Villeneuve, UP2:Nov 75:167:11679
ASCE Urban Water Resources Research Program, Murray B. McPherson and George F. Mangan, Jr., HY7:July 75:847:11445
British New Towns and the Civil Engineer, Tom Walsh, CE:Mar 75:84
Changes in the Private Sector, David Stahl, UP1:Aug 76:25:12352
The Changing Scene, Harold E. Nelson, UP1:Aug 76: 3:12307
County Planning for Suburban Growth Management, Arnold A. Goldstein, Preprint No.2817, Sept 76, 17pp.
Countywide Land Use Forecasts, Robert E. Heightchew, Jr., UP2:Nov 75:135:11682
Delphic Predictions and Cross Impact Simulation, Jarir S. Dajani and Gorman Gilbert, UP1:May 75: 49:11316
Developing Alternative Futures, John M. Courtney, UP1:Aug 76:49:12337
Economic Analysis of Residential Land-Use Alternatives, David C. Curtis and Richard H. McCuen, UP2:Nov 75:109:11678
Effects of Urbanization on Catchment Response, Rafael L. Bras and Frank E. Perkins, HY3:Mar 75: 451:11196
Engineering Geologic Data for Land-Use Planning, John D. Rockaway, UP2:Nov 75:117:11681
Highway and Sewer Impacts on Urban Development, Frank T. Rabe and James F. Hudson, UP2:Nov 75: 217:11728

Horton Plaza Redevelopment Project—A Hope for Centre City San Diego, David N. Allsbrook, Preprint No.2730, Apr 76, 5pp.
Identifying Urban Flash Flooding Problems, William P. Darby and Mitchell J. Small, WR2:Nov 76:349: 12571
Identifying Your Client, William L. Grecco and Thomas A. Dames, EI4:Oct 75:485:11663
Integrated Grant Administration Program, Roland M. Lewis and Johannes W. Kurz, TE1:Feb 75:155: 11110
Interdisciplinary Approach to Central City Development, Albert A. Dorman, Preprint No.2749, Sept 76, 10pp.
Intergovernmental Guidance of Land Use and Growth, Bruce D. McDowell, UP1:Aug 76:15: 12319
New Institutions for Joint Development, Rodney E. Engelen, UP1:May 75:11:11288
Nicollet Avenue Case Study, Rodney E. Engelen, EFAN12:Dec 74:231
Nicollet Avenue Case Study, Rodney E. Engelen, Preprint No.2672, Apr 76, 14pp.
Parking and Zoning, David K. Witheford, UP1:May 75:1:11294
Peachtree City Path Experience: Conception to Implementation, Edwin R. Koons, BP75:Dec 75: 186
Pedestrianization of the Central City, Harold Lewis Malt, BP75:Dec 75:214
Planning Criteria for Bikeways, Vincent R. Desimone, TE3:Aug 73:609:9928
Regional Transport Development and Economic Growth, Kenneth A. Brewer and Robert O. Richards, Jr., TE2:May 76:271:12126
Renovation and Recycling — New Life for Old Buildings, Virginia Fairweather, CE:Oct 75:69
Reporter's Summary of Discussions for Session V — Center City Malls, Jack L. Mahan, Jr., EFAN:Dec 74:278
San Antonio Ranch Case Study— National Environmental Policy Act, Robert G. Honts, UP2: Nov 75:127:11683
Simulation of Quality of Urban Drainage Effluents, Jiri Marsalek, IR76:July 76:564
Structural Design and Analysis of Atlanta Center, Ltd., Stephen J. Campbell and Bill L. Gunnin, ST76:Aug 76:771
Summary for Session V—Case Study of a Central City Mall, Rodney E. Engelen, EFAN:Dec 74:275
Summary of Land-Use Policy Papers, Charles B. Notess, UP1:Aug 76:147:12330
Types of Street Use in New Orleans, John F. Exnicios, BP75:Dec 75:10
Urban Life and Tall Buildings, Lynn S. Beedle, TN: UP1:Aug 76:237:12336
Urban Runoff by Linearized Subhydrographic Method, Jong-Song Chien and Krishan K. Saigal, HY8:Aug 74:1141:10766
Urban Sediment Problems: A Statement on Scope, Research, Legislation and Education, Harold P. Guy, Chmn., HY4:Apr 75:329:11256
Vegetation and Urban Environment, Asadullah Zulfacar, UP1:May 75:21:11283

Urban Highways

Genesee Expressway Corridor Analysis, Lawrence H. Lehman, Robert J. Trapani and Philip A. Habib, TE4:Nov 75:781:11726

Urbanization

Aspects of Hydrological Effects of Urbanization, William J. Schneider, Chmn., HY5:May 75:449: 11301
Design of Storm Sewer Networks, Ben Chie Yen and Ahmet Suha Sevuk, EE4:Aug 75:535:11503
Optimal Sizing of Urban Flood-Control Systems, Darryl W. Davis, HY8:Aug 75:1077:11490
QUURM — Implications for the Design of Urban Drainage Systems, W. Edgar Watt, Kenneth C. Wilson and Joan E. Eaton, IR76:July 76:580
Simulation of Quality of Urban Drainage Effluents, Jiri Marsalek, IR76:July 76:564
Unit Hydrograph Parameters Versus Urbanization, David L. Gundlach, TN: IR3:Sept 76:388:12369
Urban Life and Tall Buildings, Lynn S. Beedle, TN: UP1:Aug 76:237:12336

Urban Planning

ASCE Urban Water Resources Research Program, Murray B. McPherson and George F. Mangan, Jr., HY7:July 75:847:11445
Bicycles and Traffic, Harold C. Munn, TE4:Nov 75: 753:11729
Bikes and Malls, Harold Katner, BP75:Dec 75:4
Citizen Inputs to Public Works Projects, Desmond M. Connor, EI1:Jan 76:29:11856
Community Role in Modal Choice for Transit System Planning, Robert E. Paaswell and Janice Pafka-Gerbig, UP1:May 75:35:11305
Construction Economy: What Price Environmental Controls?, Harlan W. Fair, CO3:Sept 76:521:12427
County Planning for Suburban Growth Management, Arnold A. Goldstein, Preprint No.2817, Sept 76, 17pp.
Delphic Predictions and Cross Impact Simulation, Jarir S. Dajani and Gorman Gilbert, UP1:May 75: 49:11316
Diamonds Are The Way To Go, Vincent D. Paul and Robert G.B. Goodell, Preprint No.2681, Apr 76, 12pp.
Distributing Public Housing Resources, Bruce Yandle and George Biediger, UP2:Nov 75:147:11689
Economic Measure of Benefits of Transportation, John F. Brotchie, TE1:Feb 76:17:11888
Effects of Man on Low Flows, Henry C. Riggs, IR76: July 76:306
Evaluating Air Pollution Impacts of Transportation, Edward C. Sullivan, TE4:Nov 75:763:11721
Evaluation and Implementation of Urban Drainage Projects, Neil S. Grigg, UP1:May 75:61:11324
Hydrologic Impact of Planned Unit Developments, Richard H. McCuen and Harry W. Piper, UP1:May 75:93:11329
Interactive Simulation for Water System Dynamics, Neil S. Grigg and Maurice C. Bryson, UP1:May 75: 77:11313
Intergovernmental Guidance of Land Use and Growth, Bruce D. McDowell, UP1:Aug 76:15: 12319
Internal Migration Models and Population Forecasts, Hatim M. Hajj, UP2:Nov 75:201:11680
Issues and Problems in Urban Planning, Tung Au, EI3:July 75:305:11417
Lake Erie Airport Study — A Status Report, Herbert R. Crawford, Preprint No.2635, Apr 76, 27pp.
Measuring Watershed Land-Use Changes with Airphotos, Donald B. Stafford, James T. Ligon and M. Eugene Nettles, TE1:Feb 76:117:11925
Meeting the Earthquake Challenge: California's New Laws, Karl V. Steinbrugge and Henry J. Degenkolb, CE:Feb 75:44
Modeling of Health Care Delivery, Jeng Wen Hwang and Milton E. Harr, UP1:Aug 76:157:12345
National Land-Use Policy: Is it Needed?, Daniel A. Dreyfus, UP1:Aug 76:9:12324
Nebraska Flood-Plain Management Program—Part II, James R. Cook, HY7:July 75:983:11438
Noise in the Urban Environment, Felipe U. Derteano, UP2:Nov 75:183:11688
Quantifying Impact of Transportation Systems, William L. Smith, UP1:Mar 74:79:10416
Round Table Discussion on Future Conferences, Walter H. Kraft, BP75:Dec 75:585
Scope of Socio-Economics Considerations, E. J. Schmidt, EFEEC:Aug 75:272
Sensitivity of Trip Distribution to Subarea Focusing, Nancy L. Nihan and Jacques Lassabliere, TE3:Aug 76:555:12317
Solid Waste Management: Equity Trade-Off Models, Louis A. Fuertes, James F. Hudson and David H. Marks, UP2:Nov 74:155:10913
Summary of Land-Use Policy Papers, Charles B. Notess, UP1:Aug 76:147:12330
Tempe Bikeways — The Morning After, Elizabeth A. Drake, BP75:Dec 75:449

Two Means of Alleviating Rush-Hour Crowding, Charles Libove, TE4:Nov 73:845:10144
Urban Freeways and Changing Social Values, Kneeland A. Godfrey, Jr., CE:May 75:80
Urban Goods Movement: A Study Design, Arnim H. Meyburg and Peter R. Stopher, TE4:Nov 76:651:12531
Water Resources Planning in Urban Areas, Robert L. Fulton, HY9:Sept 75:1249:11571

Urban Renewal
Back to the People: Dallas' Blueprint for the 21st Century, Michael J. McManus, CE:July 76:57
Parking — First Stage in Downtown Redevelopment, Richard S. Beebe, Preprint No.2780, Sept 76, 10pp.
Peachtree City Path Experience: Conception to Implementation, Edwin R. Koons, BP75:Dec 75:186
Structural Design and Analysis of Atlanta Center, Ltd., Stephen J. Campbell and Bill L. Gunnin, ST76:Aug 76:771

Urban Sprawl
Use of an EIR Process in Controlling Urban Sprawl, Randolph M. Brodersen and Leonard Ortolano, UP1:Aug 76:199:12358

Urban Studies
Complex Source Regulation in Philadelphia, William C. Miller, Preprint No.2778, Sept 76, 24pp.
Selection of Models for Urban Drainage Problems: Technical Aspects and Non-Technical Constraints, Paul E. Wisner, Adel F. Ashmalla and Patrick A. Ahern, IR76:July 76:246
Urban Freeways and Changing Social Values, Kneeland A. Godfrey, Jr., CE:May 75:80
Urban Life and Tall Buildings, Lynn S. Beedle, TN:UP1:Aug 76:237:12336

Urban Transportation
Access Control on Arterial Highways, John C. Glennon and Jamil A. Azzeh, TE1:Feb 76:75:11912
An Algorithm for Route Deviation Service, Stanley T.L. Lung and Wilfred W. Recker, TE1:Feb 76:161:11931
Analysis of Metered Taxi Fares, David Ghahraman, Tung Au and Dwight M.B. Baumann, TE4:Nov 75:807:11735
Analysis of Urban Transportation Criteria, Thabet Zakaria, TE3:Aug 75:521:11496
Automated Ground Transportation System Stations with Multiple Loading Positions, Dietrich R. Bergmann, TE2:May 75:383:11328
Automobile Energy Requirements, Eric Hirst, TE4:Nov 74:815:10909
Bicycle Accidents in the City of Milwaukee, Zuhair Abou-Loghd, Arun Chatterjee and Kumares C. Sinha, TE2:May 76:347:12120
Bicycles and Traffic, Harold C. Munn, TE4:Nov 75:753:11729
Bus/Carpool FWY Lanes in the San Francisco Area, Leonard Newman, Preprint No.2646, Apr 76, 26pp.
Carpools at Large Suburban Technical Center, Robert Herman and Tenny Lam, TE2:May 75:311:11332
Chicago Urban Transportation Planning, Harold E. Nelson and William L. Barnes, Preprint No.2815, Sept 76, 27pp.
Computerized Inventory of Traffic Signs, Tapan K. Datta and David M. Litvin, TE4:Nov 75:707:11708
Contribution to Selection of Railroad Ballast, Paul N. Gaskin and Gerald P. Raymond, TE2:May 76:377:12134
Demand Model for Bus Network Design, Jende Hsu and Vasant H. Surti, TE3:Aug 76:451:12309
Design of Transit Structures for Urban Areas, David G. Hammond and Drupad B. Desai, TE1:Feb 76:1:11918
Distribution of Benefits of Public Transit Projects, Arun Chatterjee and Kumares C. Sinha, TE3:Aug 75:505:11497
Effect of Energy Shortage and Land Use on Auto Occupancy, Jahanbakhsh Behnam and Robert E. Beglinger, TE2:May 76:255:12142
Entropy Model and Intercity Modal Split in the UK, Gerald R. Leake and John R. Underwood, TE2:May 76:215:12110
Evaluating Air Pollution Impacts of Transportation, Edward C. Sullivan, TE4:Nov 75:763:11721
Evaluation of Long-Range Transit Alternatives, Walter Cherwony and Lewis Polin, TE2:May 75:199:11282
The Evolution of Urban Transportation, CE:July 76:75
Facility Location Example of Evaluation Methodology, John S. Hoffman, TE4:Nov 75:817:11727
Factors Affecting Reliability of Urban Bus Services, Brian P. Sterman and Joseph L. Schofer, TE1:Feb 76:147:11930
Genesee Expressway Corridor Analysis, Lawrence H. Lehman, Robert J. Trapani and Philip A. Habib, TE4:Nov 75:781:11726
Horton Plaza Redevelopment Project—A Hope for Centre City San Diego, David N. Allsbrook, Preprint No.2730, Apr 76, 5pp.
Measuring Transportation System Performance, Thomas R. Mongan, N. J. Nielsen and J. R. Formby, TE3:Aug 75:437:11483
Mode Choice Estimation for Small Areas, Arun Chatterjee and Kumares C. Sinha, TE2:May 75:265:11303
Modeling Social Impacts of Urban Highways, David C. Colony and Abul B. Shah Alam, TE2:May 76:395:12148
Paratransit: How You May Get Around if the Energy Shortage Takes You Out of Your Car, CE:Oct 75:84
"Para-Transit: Neglected Options for Urban Mobility," by Ronald F. Kirby, et al. (Book Review), Lester A. Hoel, CE:July 76:38
Population Change: An Indicator of Freeway Impact, Pai-kang Wang, George L. Peterson and Joseph L. Schofer, TE3:Aug 75:491:11492
Progress in Signaling for Track Guided Systems, Alastair D. McAulay, TE4:Nov 75:621:11695
Propensity of Statewide Multimodel Transportation, William D. Klink and Jason C. Yu, TE4:Nov 75:639:11710
Rail Transit Operating Cost Guidelines, Edward E. Gilcrease, Jr., Walter Kudlick and Manuel Padron, TE2:May 75:365:11314
Reserved Bus Lanes in Dallas, Texas, Mildred Cox, TE4:Nov 75:691:11720
Sensitivity of Trip Distribution to Subarea Focusing, Nancy L. Nihan and Jacques Lassabliere, TE3:Aug 76:555:12317
State-of-the-Art of Ballastless Track at-Grade, Walter L. Wheeler, TE1:Feb 76:131:11929
Traffic Generation from Land Development Proposals, Satish C. Sharma and Afifi H. Soliman, TE2:May 76:243:12153
Transportation Energy Considerations, Alexander French, TE1:Feb 76:27:11919
Urban Travel Demand Models with Competitive Modes, Paul J. Ossenbruggen and Alex Li, TE3:Aug 76:585:12314
Use of Finite Element Analyses for Railcar Design, Michael J. Dennis, TE1:Feb 76:105:11921
Ventilated Approach Regions for Railway Tunnels, Alan E. Vardy, TE4:Nov 75:609:11691

Urban Warfare
Engineering of Public Systems, Gorman Gilbert and Jarir S. Dajani, EI1:Jan 75:15:11068

U.S. Corps of Engineers
Determining Needs and Benefits of an Island Port Project Under U.S. Army Corps of Engineers Regulations, Jimmy B. Allen, WW76:Aug 76:316
Federal Legislation and Activities for Dam Safety, Homer B. Willis, EFRLD:Sept 75:5
Notching River Training Structures: Missouri River, Thomas D. Burke, WW76:Aug 76:1647
Origins of Federal Waterways Engineering, Leland R. Johnson, WW76:Aug 76:1130

U.S. Navy
Productivity Improvements Achieved in Navy Public Works Operations, Albert R. Marschall, PROD: Aug 76:135

Utah
Stratified Flow in Great Salt Lake Culvert, Edward R. Holley and Kidd M. Waddell, HY7:July 76:969: 12250

Utilities
Engineering Surveying: Chapters 2, 5, 6, 8, 16, and 20, George M. Mayfield, Chmn., SU1:Dec 76:59: 12648
Impact of Urban Utility Corridors on Agricultural Drainage, G. V. Eades, A. M. Shady and Robert S. Broughton, IR76:July 76:155
Kingwood: A Non-Assisted Private Suburban Development, Daniel B. Stauffer, Preprint No.2656, Apr 76, 26pp.
Maintenance of Services during Construction, Claude Cossette and Ernest Zbinden, CO1:Mar 75:155: 11186
Public Participation from a Utility's Viewpoint: Benefits and Problems, Henry W. Cheney, EFEEC: Aug 75:373
Utility Land Corridors Location Model — Environmental Assessment, Thomas E. Wester and Dennis W. Weeter, Preprint No.2653, Apr 76, 29pp.

Utility Theory
Models for Evaluation of Hazardous Wastes, Albert J. Klee, EE1:Feb 76:111:11940
Optimum Design for Infrequent Disturbances, Emilio Rosenblueth, ST9:Sept 76:1807:12433

Vacuum Filtration
Dewatering Chemical-Primary Sludges, David Di Gregorio and Gerald L. Shell, EE5:Oct 76:1087: 12474

Value Analysis
Value Engineering Made Mandatory on EPA Projects Over $10,000,000, Harold Tufty, CE:Sept 76:101

Value Engineering
Building and Operating Costs Versus Rental Income, Clayford T. Grimm, EI3:July 76:355:12270
Discounted Cash Flow Analysis to Select Equipment, Richard Briller, EE3:June 76:595:12190
Identifying Your Client, William L. Grecco and Thomas A. Dames, EI4:Oct 75:485:11663
Monetary Values of Life and Health, Bob Buehler, HY1:Jan 75:29:11047
Optimization of Long-Span Cold-Formed Truss Purlins, Richard T. Douty and James O. Crooker, ST11:Nov 74:2275:10952
Optimum Size of Equipment, Marvin Gates and Amerigo Scarpa, CO4:Dec 75:861:11772
The Systems Approach and Construction Management, Stanley Goldhaber, PROD:Aug 76:71
Value Engineering Made Mandatory on EPA Projects Over $10,000,000, Harold Tufty, CE:Sept 76:101

Valves
Automated Valves for Surface Irrigation Pipelines, Allan S. Humpherys and Robert L. Stacey, IR2: June 75:95:11380
Design of Pressure Transient Control System, Morris Driels, HY5:May 75:437:11280
Hydraulic Performance of Tilting-Disk Check Valves, Ronald S. Kane and Soung M. Cho, HY1:Jan 76: 57:11873
Lower Granite Lock — Prototype Performance, George C. Richardson, WW76:Aug 76:1442
Pressure Reducing Valves in Pipe Network Analysis, Roland W. Jeppson and Allen L. Davis, HY7:July 76:987:12252

Vanes
In-Situ Undrained Shear Strength of Two Marine Clays, Demetrious Koutsoftas and Joseph A. Fischer, GT9:Sept 76:989:12431

Vane Shear Tests
Correlations Between Vane Shear Strength and Cone Resistance in Some Norwegian Soft Clays, Tom Lunne, GT75:June 75:II-161
Embankment on Soft and Sensitive Clay Foundation, Oscar Dascal and Jean-Pierre Tournier, GT3:Mar 75:297:11193
In Situ Measurement of Soil Properties, Harvey E. Wahls, Chmn., GT75:June 75
In-Situ Undrained Shear Strength of Two Marine Clays, Demetrious Koutsoftas and Joseph A. Fischer, GT9:Sept 76:989:12431
Measurement of In Situ Strength, John H. Schmertmann, GT75:June 75:II-57
Use of Vane Shear Test for Determining the Undrained Shear Strength of Clays, Odd S. Gregersen, GT75:June 75:II-141
Vane Shear Strengths at Two High Rotation Rates, Alexander D. Smith and Adrian F. Richards, OE75:June 75:421

Variability
Equalization of Time Variable Waste Loads, Vladimir Novotny and Robert M. Stein, EE3:June 76:613: 12191
Statistical Design of Equalization Basins, Dominic M. Di Toro, EE6:Dec 75:917:11782

Variable Costs
Predesign Cost-Estimation Function for Buildings, Vasily Kouskoulas and Edward Koehn, CO4:Dec 74:589:10992

Variables
Multistage Optimization of Structures, Lawrence A. Twisdale and Narbey Khachaturian, ST5:May 75: 1005:11297

Variance (Statistics)
Correlation Analysis of Hydrometeorological Data, Ashok N. Shahane, Daniel Thomas and Paul Bock, HY10:Oct 76:1561:12484

Variance Analysis
Variational Principles for Finite Element Analysis of Consolidation, Ranbir S. Sandhu, NMG:June 76:I-20

Vectors (Biology)
Impact of Water Resources on Vector-Borne Diseases, Richard O. Hayes, WR2:Nov 76:177: 12526

Vectors (Mathematics)
Impact of CDC STAR-100 Computer on Finite Element Systems, Ahmed K. Noor and Robert E. Fulton, ST4:Apr 75:731:11216

Vegetables
Effect of Drainage on the Subsidence of Organic Soil, Ross W. Irwin, IR76:July 76:211
Persistence of Virus on Sewage-Irrigated Vegetables, Edward P. Larkin, John T. Tierney and Robert Sullivan, EE1:Feb 76:29:11935

Vegetation
Effects of Deforestation of Slopes, Colin E. Brown and Maw S. Sheu, GT2:Feb 75:147:11141
Hydraulics of Sheet Flow in Wetlands, Bent A. Christensen, WW76:Aug 76:746
Vegetation and Urban Environment, Asadullah Zulfacar, UP1:May 75:21:11283
Vegetative Management of Water Hyacinths, Edward O. Gangstad, WW76:Aug 76:672

Vegetation Effects
Analysis of Flow through Vegetation, Sylvester Petryk, HY7:July 75:871:11457

Vegetative Management of Water Hyacinths, Edward O. Gangstad, WW76:Aug 76:672

Vehicle Detection
Traffic Volume Counting Recorders, Edward L. Priestas and Thomas E. Mulinazzi, TE2:May 75: 211:11306

Vehicle Operating Costs
Northern Off-Road Transportation in the 70's, I. A. Thomas, CO3:Sept 75:635:11573

Vehicles
Acquiring Traffic Data by In-Motion Weighing, R. B. Machemehl, Clyde E. Lee and C. Michael Walton, TE4:Nov 75:681:11716
The Auto Restricted Zone/Multi-User Vehicle Systems Study: A Status Report, Beth Irons French and William S. Herald, BP75:Dec 75:197
Benefits of Separating Pedestrians and Vehicles, Ronald L. Braun and Marc F. Roddin, BP75:Dec 75:406
Energy-Intensive Analysis of Truck Transportation, Balakrishnamurthy Ashtakala, TE2:May 75:225: 11289
Incorporating Highway Safety into Level of Service, Walter J. Diewald, TE2:May 74:417:10557
Load Factor Analysis of Design of Bridges, James C. Porter, ST5:May 76:891:12098
Minimum Cost in Residential Refuse Vehicle Routes, Jon C. Liebman, James W. Male and Magne Wathne, EE3:June 75:399:11368
Planning Criteria for Bikeways, Vincent R. Desimone, TE3:Aug 73:609:9928
Transportation Energy Considerations, Alexander French, TE1:Feb 76:27:11919
Two Means of Alleviating Rush-Hour Crowding, Charles Libove, TE4:Nov 73:845:10144

Vehicular Traffic Control
Location and Capacity of Unsignalized Exits, Ezra Hauer, TE2:May 75:179:11291

Velocity
Anchor-Last Deployment Simulation by Lumped Masses, Robert W. Thresher and John H. Nath, WW4:Nov 75:419:11709
Constrained and Shear Moduli for Finite Element, Vincent P. Drnevich, GT5:May 75:459:11319
Effects of Surface Fluctuations on Wave Field Statistics, Chi C. Tung and Keikhosrow Pajouhi, Preprint No.2705, Apr 76, 17pp.
Evaluation of Circulation in Estuaries, Karim A. Abood and Efstathios L. Bourodimos, HY9:Sept 76: 1211:12408
Float Calibration in Intergrated-Float Techniques, Peter H. John, F. Allan Johnson and Peter Sutcliffe, HY8:Aug 76:1071:12308
Procedural Errors in Alluvial Channel Measurements, Tariq Masood, Khalid Mahmood and M. M. Siddiqui, WW76:Aug 76:591
Reaeration and Velocity Prediction for Small Streams, Edward G. Foree, EE5:Oct 76:937:12448
Shallow Laminar Flows over Rough Granular Surfaces, Harry O. Phelps, HY3:Mar 75:367:11166
Velocities Above Rough Bed in Oscillatory Flow, John F.A. Sleath, WW4:Nov 74:287:10930

Velocity Distribution
Air-Entrainment in High Head Gated Conduits, Hari R. Sharma, HY11:Nov 76:1629:12523
Friction Effects on Spatially Varied Open Channel Flows with Increasing Discharge, J. D. Lin, Victor E. Scottron and Hsiang Kuei Soong, WW76:Aug 76:1517
Hydraulics of Sheet Flow in Wetlands, Bent A. Christensen, WW76:Aug 76:746
Measuring Water Velocity by Ultrasonic Flowmeter, Jack C. Schuster, HY12:Dec 75:1503:11806
Renewal Characteristics of Chesapeake Bay, A. Y. Kuo, Evon P. Ruzecki and Ching S. Fang, OE75: June 75:1065
Some Features of Wind Action on Shallow Lakes, Robert B. Banks, EE5:Oct 75:813:11640
Speed of Ships in Restricted Navigation Channels, R. Bryan Schofield, WW2:May 74:133:10539

Velocity Head
Nonlinear Flow of Wave Crests Past a Thin Pile, Robert J. Hallermeier, WW4:Nov 76:365:12551

Ventilating Systems
Washington, D.C. Mall Tunnel, Allan B. MacPherson and Philip E. Egilsrud, CE:Feb 75:64

Ventilation
Fifty-Year Highlights of Tunneling Equipment, David A. Day and Bradford P. Boisen, CO2:June 75:265: 11393
Ventilated Approach Regions for Railway Tunnels, Alan E. Vardy, TE4:Nov 75:609:11691

Venturi Flumes
Venturi Flumes for Circular Channels, Mordechai H. Diskin, TN: IR3:Sept 76:383:12369

Vertical Indicators
Pressure Effects on Great Lakes Vertical Control, Frank H. Quinn, SU1:Dec 76:31:12605

Vertical Loads
Stresses in Soils due to Vertical Load on Piles, Verendra Singh, NMG:June 76:1-451

Viaducts
Viaducts—A Case Study, Rowland Richards, Jr. and David G. Elms, EI4:Oct 74:293:10845

Vibration
Acoustic Radiation of Submerged Vibrating Structures, Robert R. Smith and John T. Hunt, Preprint No.2711, Apr 76, 16pp.
Ambient Response Analysis of Some Tall Structures, George T. Taoka, Michael Hogan, Fazlur R. Khan and Robert H. Scanlan, ST1:Jan 75:49:11051
Analysis of Shear Cores Using Superelements, Barry J. Goodno and James M. Gere, ST1:Jan 76:267: 11837
Binary Flutter of Suspension Bridge Deck Sections, Yasuharu Nakamura and Takeshi Yoshimura, EM4: Aug 76:685:12327
Design of Building Floor Systems Subjected to Steady-State Dynamic Loads, Donald W. Vannoy, Furman W. Barton and Conrad P. Heins, ST76:Aug 76:720
Determination of the Natural Modes of a Complex Elastic Structure in Terms of the Natural Modes of the Unconstrained Components, Jay S. Abramowitz, ST76:Aug 76:689
Dynamic Behavior of Partially Embedded Pile, Muhammed A. Satter, GT7:July 76:775:12265
Dynamic Environment Simulation by Pulse Techniques, Sami F. Masri and Frederick B. Safford, EM1:Feb 76:151:11923
Dynamic Properties of Tall Shear-Wall Buildings, George T. Taoka, Augustine S. Furumoto and Arthur N.L. Chiu, ST2:Feb 74:305:10336
Dynamic Relaxation Solution of Seepage Problems, Chandrakant J. Parekh, NMG:June 76:II-1133
Dynamic Stiffness of Circular Foundations, Eduardo Kausel and Jose M. Roesset, EM6:Dec 75:771: 11800
Dynamic Stiffness of Piles, G. W. Blaney, Eduardo Kausel and Jose M. Roesset, NMG:June 76:II-1001
Earthquake Behavior of Suspended-Floor Buildings, Barry J. Goodno and James M. Gere, ST5:May 76: 973:12105
An Effective Stress Model for Liquefaction, W. D. Liam Finn, Kwok Wing Lee and Geoffrey R. Martin, Preprint No.2752, Sept 76, 30pp.
Energy Absorbing Boundary for Anisotropic Material, Somasundaram Valliappan, Weeks White and Ian K. Lee, NMG:June 76:II-1013
Evaluation of Soil Liquefaction Effects on Level Ground During Earthquakes, H. Bolton Seed, Preprint No.2752, Sept 76, 104pp.

Experimental Methods and Instrumentation for Power Generation Structures — Some Case Studies, Joseph W. Fortey and Raymond R. Funk, Preprint No.2717, Apr 76, 25pp.
Finite Element Analysis of Doubly Corrugated Shells, Herbert A. Mang, C. V. Girya Vallabhan and Jimmy H. Smith, ST10:Oct 76:2033:12482
Floating Plate under Wind Waves and Human Response, Masanobu Shinozuka, H. M. Hwang and E. Makitani, Preprint No.2650, Apr 76, 30pp.
Flow-Induced Vibration of Vertical-Lift Gate, J. David Hardwick, HY5:May 74:631:10546
Forced Vibrations of Strip Footings on Layered Soils, George C. Gazetas and Jose M. Roesset, ST76:Aug 76:115
Forces on Many Cylinders Near a Plane Boundary, Tokuo Yamamoto and John H. Nath, Preprint No.2633, Apr 76, 19pp.
Free Vibration Analysis Using Substructuring, Gordon H. Holze and Arthur P. Boresi, ST12:Dec 75:2627:11788
Hanging Cable as Rotational Vibration Absorber, Ollie L. Vance and James H. Woodward, TN: EM2:Apr 76:377:12017
Hydrodynamic Forces on Multiple Circular Cylinders, Tokuo Yamamoto, HY9:Sept 76:1193:12395
Influence of Canyon on Soil-Structure Interaction, Hung L. Wong, Mihailo D. Trifunac and Kevin K. Lo, EM4:Aug 76:671:12328
Investigation of Dynamic Taping, Bruce W. Golley and John Sneddon, SU2:Nov 74:115:10938
Natural Frequencies of a Turbine Foundation, Chung-Tung Shen and Norman E. Stone, STN75: Dec 75:II-302
Natural Vibrations of Suspension Cables, Harry H. West, Louis F. Geschwindner and Joseph E. Suhoski, ST11:Nov 75:2277:11712
Nonlinear Analysis of Foundation Vibrations, Mete Oner and Nilmar Janbu, NMG:June 76:II-1025
Nonlinear Panel Response to Nonstationary Wind Forces, Rimas Vaicaitis, EM4:Aug 75:333:11486
Numerical-Perturbation Methods in Numerical Mechanics, Ali Hasan Nayfeh, NMG:June 76:I-168
On the Accuracy of the Solution of Finite Element Equilibrium Equations, Klaus-Jurgen Bathe, NMG: June 76:I-82
Optimum Structural Design with Dynamic Constraints, Juan H. Cassis and Lucien A. Schmit, Jr., ST10:Oct 76:2053:12491
Out-of-Plane Vibration of Thick Circular Ring, James Kirkhope, EM2:Apr 76:239:12022
Parametric Resonance of Suspension Roofs in Wind, Haruo Kunieda, EM1:Feb 76:59:11899
Prestressed Strip on Elastic Foundation, George J. Tsamasfyros and Pericles S. Theocaris, TN: EM5: Oct 76:927:12443
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, Preprint No.2687, Apr 76, 28pp.
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, EM6:Dec 76:1041:12640
Response of a Column in Random Vibration Tests, Gene K. Baxter and Ross M. Evan-Iwanowski, ST9:Sept 75:1749:11568
Response of Structures to Random Wind Forces, Michael J. O'Rourke, Richard A. Parmelee and Ross B. Corotis, ST12:Dec 75:2557:11786
Seismic Interaction of Structures on Hysteretic Foundations, Anestis S. Veletsos and V. V. Damodaran Nair, ST1:Jan 75:109:11046
Some Finite Element Solutions in the Dynamics of Circular Footings, S. P. Dasgupta and N. S.V. Kameswara Rao, NMG:June 76:II-1038
Structural System Parameter Estimation by Two-Stage Least Squares Method, Will Gersch, George T. Taoka and Robert Liu, EM5:Oct 76:883:12464
Tendon Control in Tall Structures, John Roorda, ST3:Mar 75:505:11168
The Threshold of Dilation Under Cyclic Loading, Robert D. Stoll and Lembit Kald, Preprint No.2752, Sept 76, 26pp.
Torsional Response of High-Rise Buildings, Gary C. Hart, Roger M. DiJulio, Jr. and Marshall Lew, ST2: Feb 75:397:11126
Torsional Response of Rigid Embedded Foundation, Rany J. Apsel and Juan Enrique Luco, EM6:Dec 76:957:12627
Ultimate Instability of Earthquake Structures, Franklin Y. Cheng and Kenneth B. Oster, ST5:May 76:961:12117
Unsteady Lifts and Wakes of Oscillating Rectangular Prisms, Yasuharu Nakamura and Taketo Mizota, EM6:Dec 75:855:11813
Variation of Tapered Plates by Finite Strip Method, Victor A. Pulmano and Radhey K. Gupta, TN: EM3:June 76:553:12168
Verification of Hydroelastic Similitude Criteria, Otto Haszpra, HY4:Apr 76:469:12048
Vibration Measurements of Steel Transit Structures, Marshall L. Silver and Thomas Venema, ST9:Sept 75:1855:11557
Vibratory In Situ and Laboratory Soil Moduli Compared, Robert W. Cunny and Zelma B. Fry, SM12:Dec 73:1055:10219
Vibroflotation and Terra-Probe Comparison, Ralph E. Brown and Andrew J. Glenn, GT10:Oct 76:1059: 12498

Vibration Analysis

Vibration-Absorber Effect under Seismic Excitation, Richard G. Dong, ST10:Oct 76:2021:12495

Vibration Control

Hanging Cable as Rotational Vibration Absorber, Ollie L. Vance and James H. Woodward, TN: EM2:Apr 76:377:12017

Vibratory Compacting

The Threshold of Dilation Under Cyclic Loading, Robert D. Stoll and Lembit Kald, Preprint No.2752, Sept 76, 26pp.

Vibratory Compaction

Massive Compaction of Granular Soil — How We Stand, Henry W. Janes and Robert D. Anderson, Preprint No.2777, Sept 76, 28pp.

Vibratory Pile Driving

Vibroflotation and Terra-Probe Comparison, Ralph E. Brown and Andrew J. Glenn, GT10:Oct 76:1059: 12498

Vibroflotation

Massive Compaction of Granular Soil — How We Stand, Henry W. Janes and Robert D. Anderson, Preprint No.2777, Sept 76, 28pp.
Vibroflotation and Terra-Probe Comparison, Ralph E. Brown and Andrew J. Glenn, GT10:Oct 76:1059: 12498
Vibroflotation Compaction of Granular Hydraulic Fills, Ralph E. Brown, Preprint No.2657, Apr 76, 30pp.

Viral Diseases

Disease Risks of Occupational Exposure to Sewage, C. Scott Clark, Edward J. Cleary, Gilbert M. Schiff, Clavin C. Linneman, Jr., John P. Phair and Terrence M. Briggs, EE2:Apr 76:375:12038

Virginia

Bailey's Crossroads: A/E Liability Test, Virginia Fairweather, CE:Nov 75:58
Consultants Reviewing Plans of Other Consultants in Fairfax County, Va.; Landslides Greatly Reduced, Eugene E. Dallaire and C. S. Coleman, CE:Sept 76: 77
Integrated Evaluation Programs for Fairfax County, Va., Jim Reid, UP1:Aug 76:137:12332
Land-Based Modeling System for Water Quality Management Studies, Walter M. Grayman, Richard M. Males, William E. Gates and A. W. Hadder, HY5:May 75:567:11327

Viruses
Ecology of Blue-Green Algal Viruses, Robert E. Cannon, Miriam S. Shane and Eugene DeMichele, EE6:Dec 74:1205:11012
Persistence of Virus on Sewage-Irrigated Vegetables, Edward P. Larkin, John T. Tierney and Robert Sullivan, EE1:Feb 76:29:11935
Recycling Allows Zero Wastewater Discharge, Lloyd A. Dove, CE:Feb 75:48
Virus-Coal Sorption Interaction, Pushpavadan P. Oza and Malay Chaudhuri, EE6:Dec 76:1255:12633
Virus Sampling in Wastewater—Field Experiences, Robert P. Miele and Michael W. Selna, Preprint No.2724, Apr 76, 30pp.

Viscoelasticity
FE Analyses of Rafts on Viscoelastic Foundations, Yang H. Huang, NMG:June 76:I-463
Finite Element Analysis of Piles in Viscoelastic Soil, John R. Booker and Harry G. Poulos, NMG:June 76:I-425
Numerical Analysis of Thermal Crack Propagation in Pavement Overlays, H. S. Chang, Robert L. Lytton and S. H. Carpenter, NMG:June 76:I-526
One-Dimensional Soil Transients by Characteristics, E. Benjamin Wylie and Victor L. Streeter, NMG: June 76:I-151
Viscoelastic Analysis About Deformation of Weak Ground, Tomoyuki Akagi, Yoshinori Ito and Makoto Irobe, NMG:June 76:II-639

Viscoelastic Theory
New Rheological Model for Soil Behavior, Fujiya Komamura and Rodney J. Huang, GT7:July 74:807: 10675

Viscosity
Computation of Seismic Induced Flow Landslide, Hung Tao Shen and Wen Huang, NMG:June 76:II-1054
New Rheological Model for Soil Behavior, Fujiya Komamura and Rodney J. Huang, GT7:July 74:807: 10675
A Numerical Analysis of the Maximum Earth Pressure Acting on Tunnel Lining, Shunsuke Sakurai and Yoshiaki Yamamoto, NMG:June 76:II-821
Oxygen Transfer at High Solids Concentrations, Dale R. Baker, Raymond C. Loehr and Arthur C. Anthonisen, EE5:Oct 75:759:11641
Similitude in Free-Surface Vortex Formations, Larry L. Daggett and Garbis H. Keulegan, HY11:Nov 74: 1565:10941
Viscoplastic Constitutive Matrix Corresponding to the Hyperbolic Sine Creep Law, Guenter W. Borm, NMG:June 76:I-357

Visibility
Nighttime Visibility Through Retro-Reflective Materials, Robert A. Isaksen, BP75:Dec 75:426

Vision
Visual Quality Controls in Highway Design, Bob L. Smith, TE3:Aug 75:479:11487

Vocational Guidance
Can We Engineer Vocational Assessment and Counseling for Everyone?, John L. Holland, CE: May 76:92

Volume Change
In Situ Measurement of Volume Change Characteristics, James K. Mitchell and William S. Gardner, GT75:June 75:II-279
Undrained Volume Changes in Compacted Cohesive Soil, James L. Withiam and Fred H. Kulhawy, GT10:Oct 76:1029:12483

Vortices
Aerodynamic Investigations of In-Line Slender Towers for Heavy Water Plants, K. R. Cooper, H. P.A.H. Irwin and R. L. Wardlaw, ST76:Aug 76:286
Base Pressure of Oscillating Circular Cylinders, Peter K. Stansby, EM4:Aug 76:591:12311
Effect of Separation Angle on Vortex Streets, John E.L. Simmons, EM5:Oct 75:649:11653
Flow Visualization in Free Shear Layers, Joseph A. Clark and Eric Markland, HY11:Nov 73:1897: 10119
Mechanism for Streamflow Meandering, Michael C. Quick, HY6:June 74:741:10587
Old and New Concept of Tornadoes, T. Theodore Fujita, Preprint No.2784, Sept 76, 10pp.
Similitude in Free-Surface Vortex Formations, Larry L. Daggett and Garbis H. Keulegan, HY11:Nov 74: 1565:10941
Transverse Forces on Vertical Cylinders in Waves, Michael de St. Q. Isaacson and David J. Maull, WW1:Feb 76:49:11934
Unsteady Lifts and Wakes of Oscillating Rectangular Prisms, Yasuharu Nakamura and Taketo Mizota, EM6:Dec 75:855:11813
Vortex-Excited Oscillations of Elastic Cylinders, Richard A. Skop and Owen M. Griffin, OE75:June 75:535
Vortex Suppression in Stilling Pond Overflow, Y. R. Reddy and John Pickford, HY11:Nov 74:1685: 10969

Wake Detection
Wake Study of Stiffening Truss and Box Girder, Timothy A. Reinhold, Henry W. Tieleman and Francis J. Maher, ST9:Sept 76:1643:12372

Wakes
Dispersion of Pollutants in Automobile Wakes, Dennis D. Lane and James J. Stukel, EE3:June 76: 571:12189
Unsteady Lifts and Wakes of Oscillating Rectangular Prisms, Yasuharu Nakamura and Taketo Mizota, EM6:Dec 75:855:11813

Walking
The Current Status of Transportation Control Plans, Gary Hawthorn, BP75:Dec 75:557
Pedestrianization of the Central City, Harold Lewis Malt, BP75:Dec 75:214
Planning Pedestrian Systems for a Prototype New Town in Colombia, John B. Frazier, BP75:Dec 75: 245
The Role of the Pedestrian, John J. Fruin, BP75:Dec 75:26
Walking and Biking in the Traffic Mix, Judith T. O'Connor, BP75:Dec 75:435
Young Pedestrian Safety (The School Walking Trip), Martin L. Reiss and H. Douglas Robertson, BP75: Dec 75:389

Walking Distance
Planning Pedestrian Systems for a Prototype New Town in Colombia, John B. Frazier, BP75:Dec 75: 245
The Role of the Pedestrian, John J. Fruin, BP75:Dec 75:26
Young Pedestrian Safety (The School Walking Trip), Martin L. Reiss and H. Douglas Robertson, BP75: Dec 75:389

Walking Speed
Planning Pedestrian Systems for a Prototype New Town in Colombia, John B. Frazier, BP75:Dec 75: 245
The Role of the Pedestrian, John J. Fruin, BP75:Dec 75:26

Wall Friction
Flow Visualization in Free Shear Layers, Joseph A. Clark and Eric Markland, HY11:Nov 73:1897: 10119
Numerical Design-Analysis for Piles in Sands, Chandrakant S. Desai, GT6:June 74:613:10617

Walls
Analysis of Interconnected Open Section Shear Wall Structures, Bungale S. Taranath, ST11:Nov 75: 2367:11736

Analysis of RC Shear Panels under Cyclic Loading, David Darwin and David A. Pecknold, ST2:Feb 76: 355:11896
Analysis of Shear Cores Using Superelements, Barry J. Goodno and James M. Gere, ST1:Jan 76:267: 11837
Cladding and the Wind, Keith J. Eaton, ST5:May 76: 1043:12114
Comparison of Three-Dimensional Analysis of Concrete Shear Wall Buildings and Their Actual Behavior, Venkataswamy Ramakrishnan, ST76:Aug 76:95
Concrete Walls for Highway Noise Reduction, Edwin C. Lokken, TE4:Nov 76:637:12534
Coupled Shear Wall Analysis by Lagrange Multipliers, Riadh S. Al-Mahaidi and Arthur H. Nilson, ST11:Nov 75:2359:11732
Design for Differential Movement in Brick Walls, Clayford T. Grimm, ST11:Nov 75:2385:11739
Diaphragm Braced Members and Design of Wall Studs, Amir Simaan and Teoman B. Pekoz, ST1:Jan 76:77:11851
Ductile Behavior of Coupled Shear Walls, Thomas Paulay and Arumbakkam R. Santhakumar, ST1:Jan 76:93:11852
Elastoplastic Analysis of Coupled Shear Walls, Kumarapillai K. Nayar and Alexander Coull, ST9: Sept 76:1845:12401
Ferrocement Load-Bearing Wall Elements, Prakash Desayi and Arun D. Joshi, ST9:Sept 76:1903:12420
Finite Element Analysis of Wood-Stud Walls, Anton Polensek, ST7:July 76:1317:12234
Flow-Induced Forces on Protruding Walls, Eduard Naudascher and Frederick A. Locher, HY2:Feb 74: 295:10347
Influence of Canyon on Soil-Structure Interaction, Hung L. Wong, Mihailo D. Trifunac and Kevin K. Lo, EM4:Aug 76:671:12328
Integrated Study of Reinforced Earth—II: Behavior and Design, Chih-Kang Shen, Karl M. Romstad and Leonard R. Herrmann, GT6:June 76:577:12210
Metal Ties and Anchors for Brick Walls, Clayford T. Grimm, ST4:Apr 76:839:12067
New Foundations in an Old Neighborhood, Edmund G. Johnson, CE:Nov 76:50
Nonlinear Seismic Response of a Coupled Wall System, Stephen A. Mahin and Vitelmo V. Bertero, ST9:Sept 76:1759:12407
Random Vibration of a Compliant Wall, Jann-Nan Yang and Robert A. Heller, EM6:Dec 76:1041: 12640
Resistance of Masonry Infill Walls to Out-of-Plane Dynamic Motion, Bernard L. Gabrielsen and Kenneth Kaplan, Preprint No.2771, Sept 76, 26pp.
Scale Model Study of Los Angeles International Airport, Richard G. Cann, TE3:Aug 75:455:11489
Seepage through Opening in Cutoff Wall Under Weir, Suresh P. Brahma, GT3:Mar 75:329:11204
Shear of Light-Gage Partitions in Tall Buildings, Wagih M. El-Dakhakhni, ST7:July 76:1431:12257
Simplified Analysis of Wall-Frame Building Structures, Carlos A. Prato, TN: ST12:Dec 76: 2353:12593
Three-Dimensional Analysis of Shear Wall Buildings to Lateral Load, Jayanta K. Biswas and Wai K. Tso, ST5:May 74:1019:10537
Torsional Analysis of Perforated Core Structure, Avigdor V. Rutenberg and Wai K. Tso, ST3:Mar 75:539:11167
Wall-Beam Frames under Static Lateral Load, Allen L. Mee, Ian J. Jordaan and Michael A. Ward, ST2: Feb 75:377:11121

Walter L. Huber Prize

1976 Walter L. Huber Civil Engineering Research Prizes Presented to Zdenek P. Bazant, Danny L. Fread, Lester A. Hoel, Paul H. King, and John Lysmer, CE:Oct 76:99

Warehouses

Gate-Arrival Terminals—Solution for Air Cargo?, Francis Chin, Richard de Neufville and Jorge Rebelo, TE1:Feb 76:47:11890

Warpage

Analysis of Interconnected Open Section Shear Wall Structures, Bungale S. Taranath, ST11:Nov 75: 2367:11736
Stiffness Matrices for Beam Members Including Warping Torsion Effects, John L. Meek and Peter Swannell, TN: EM1:Feb 76:193:11884
Warping and Distortion at I-Section Joints, Porpan Vacharajittiphan and Nicholas S. Trahair, ST3:Mar 74:547:10390

Washers (Spacers)

Light-Gage Steel Bolted Connections without Washers, Ken P. Chong and Robert B. Matlock, ST7:July 75:1381:11433

Washington

Evergreen Point Bridge Maintenance Problems, Colin B. Brown, D. R. Christensen and G. F. Demich, ST76:Aug 76:189
Impact of Dredging on Water Quality in Grays Harbor, Washington, John M. Smith, James B. Phipps, Eugene B. Schermer and Don F. Samuelson, DIEE:Jan 76:512
Sediment and Elutriate Toxicity to Oyster Larvae, Rick D. Cardwell, Charles E. Woelke, Mark I. Carr and Eugene W. Sanborn, DIEE:Jan 76:684

Washington, D.C.

Changes in Socioeconomic Considerations, Walter E. Lewis, UP1:Aug 76:29:12355
Integrated Evaluation from a Regional Perspective, Jane Rodgers and George V. Wickstrom, UP1:Aug 76:125:12338
Nation's Capital Faces Critical Water Problems, CE: June 75:58
Project Communication and the Washington Metro System, William S. Alldredge, PROD:Aug 76:153
Unique Team Effort on Washington Subway Project, Delon Hampton and David Novick, EI1:Jan 76: 129:11872
Washington, D.C. Mall Tunnel, Allan B. MacPherson and Philip E. Egilsrud, CE:Feb 75:64
Washington Metro Access Facilities, Mark M. Akins, CE:July 75:63
Washington Metro: Our National Model, Robert S. O'Neil and Edmund A. Fairhead, CE:Sept 76:70

Waste Disposal

Classification of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY10:Oct 75:1315: 11643
Comparison of Single-Point Injections in Pipe Flow, Ahmed M. Ger and Edward R. Holley, HY6:June 76:731:12172
Construction Solid Waste, David A. Spivey, CO4: Dec 74:501:10993
Dense Effluent Dispersion in a Stream, Henry Crew and Robert O. Reid, EM1:Feb 76:77:11915
Deposition and Erosion in the Dredge Spoil and Other New York Bight Dumping Areas, George L. Freeland and George F. Merrill, DIEE:Jan 76:936
Dredged Material Confinement Facilities as Solid-Liquid Separation Systems, Raymond J. Krizek, Joseph A. FitzPatrick and Dimitrios K. Atmatzidis, DIEE:Jan 76:609
Dredged Material Disposal: Social Costs and Other Externalities, R. M. Pope, DIEE:Jan 76:398
Energy-Wastewater Treatment and Solids Disposal, William F. Garber, George T. Ohara and Sagar K. Raksit, EE3:June 75:319:11357
Environmental Baseline Study on the Continental Shelf off the New York Bight, Geraldine V. Cox, Preprint No.2655, Apr 76, 20pp.
Equalization of Flow Variations in Combined Sewers, Lars-Eric Janson, Stein Bendixen and Anders Harlaut, EE6:Dec 76:1139:12596
Experience in Using Dredge Material for Construction Purposes, Joseph H. Lamar and James E. Laier, DIEE:Jan 76:882
First Steps Toward Achieving Disposal Area Reuse, Raymond L. Montgomery and Michael R. Palermo, DIEE:Jan 76:529

Future of Sanitary Landfill, Bruce Thompson and Iraj Zandi, EE1:Feb 75:41:11113
Ground-Water's Role in Water Quality Management, John O. Osgood, HY3:Mar 75:517:11159
Habitat Development on Dredged Material, Hanley K. Smith, DIEE:Jan 76:856
Hydraulic Dredge Spoil for Land Reclamation, Carl W. Garbe and Kuei-wu Tsai, Preprint No.2678, Apr 76, 24pp.
Impact of Public Law 92-532 on Dredging and Disposal, Kenneth S. Kamlet, DIEE:Jan 76:49
Landfill Disposal of Liquid Sewage Sludge, Ralph Stone, EE1:Feb 75:91:11112
Management of Waste Fluids in Salaquifers, Raphael G. Kazmann, Oscar K. Kimbler and Walter R. Whitehead, IR4:Dec 74:413:10991
"Manual of Engineering Practice on Sanitary Landfill," by the ASCE Solid Waste Management Committee of the Environmental Engineering Division (Book Review), Frank J. Humenik, CE: Aug 76:34
Mobility of Trace Metals during Open Water Disposal of Dredged Material and Following Resedimentation, Kenneth Y. Chen, James C.S. Lu and Amancio Z. Sycip, DIEE:Jan 76:435
Modeling of Coastal Dredged Material Disposal, Stuart P. Bowen, DIEE:Jan 76:202
Optimal Control of Nitrogen Losses from Land Disposal Areas, Douglas A. Haith, EE6:Dec 73: 923:10200
Planning and Control of Combined Sewerage Systems, William R. Giessner, Robert T. Cockburn, Frank H. Moss, Jr. and Mark E. Noonan, EE4:Aug 74:1013:10744
Predicting and Controlling Turbidity Around Dredging and Disposal Operations, William D. Barnard, DIEE:Jan 76:930
Quarantine Island Disposal Plan, George Marsch, DIEE:Jan 76:579
Review of Models of Tidal Waters, Jon B. Hinwood and Ian G. Wallis, HY11:Nov 75:1405:11693
Sediment-Water Interaction during Dredging Operations, John F. Sustar, Thomas H. Wakeman and Richard M. Ecker, DIEE:Jan 76:736
Silt Curtains for Dredging Turbidity Control, Edward E. Johanson, DIEE:Jan 76:990
Simple Method for Predicting Dispersion in Streams, Raul S. McQuivey and Thomas N. Keefer, EE4: Aug 74:997:10708
Status of NOAA's Ocean Dumping Research in the New York Bight, R. Lawrence Swanson, Preprint No.2690, Apr 76, 30pp.
Subsurface Environment—Private Property or Public Domain?, William R. Walker and William E. Cox, HY11:Nov 74:1699:10958
Synthetic Aggregate From Incinerator Residues, Horace R. Blank, EM1:Feb 76:31:11898
Thalweg Disposal of Riverine Dredged Material, Peter F. Lagasse, Daryl B. Simons and Yung H. Chen, DIEE:Jan 76:556
Ultimate Fate of Suspended Material in Estuaries, Ray B. Krone, DIEE:Jan 76:180
Use of Jet Pumps in Marine Waste Disposal, Yerachmiel Argaman, Michael Vajda and Noah Galil, EE5:Oct 75:703:11639
Water Quality Effects of a Dredging Disposal Area, Raymond J. Krizek, Brian J. Gallagher and Gabor M. Karadi, EE2:Apr 76:389:12040
Waters of the United States, William L. Black, DIEE: Jan 76:10

Waste Heat

Heat Disposal in Water Environment, Donald R.F. Harleman, HY9:Sept 75:1117:11585
One-Dimensional Temperature Predictions in Unsteady Flows, Dominque N. Brocard and Donald R.F. Harleman, HY3:Mar 76:227:11982
Waste Heat Discharges from Offshore Power Plants, E. Eric Adams, Charles W. Almquist, Diane V. Ingraham and Keith D. Stolzenbach, OE75:June 75: 41

Waste Recycling

Practical Refuse Recycling, C. Edward Walter, EE1: Feb 76:139:11941
Recycling Refuse Into Energy, Kneeland A. Godfrey, Jr., CE:Sept 76:86

Wastes

Feedlot Wastes to Useful Energy — Fact or Fiction?, Lawrence A. Schmid, EE5:Oct 75:787:11647
Models for Evaluation of Hazardous Wastes, Albert J. Klee, EE1:Feb 76:111:11940
Use of Crushed Limestone to Neutralize Acid Wastes, Frank H. Pearson and Archie J. McDonnell, EE1:Feb 75:139:11131

Waste Treatment

Biosorption Isotherm for Uranium Recovery, Yishu Chu and James E. Zajic, TN: EE5:Oct 76:1109: 12442
Design Graphs for Activated Sludge Process, Michael D. Mynhier and C. P.Leslie Grady, Jr., EE5:Oct 75:829:11659

Waste Usage

First Steps Toward Achieving Disposal Area Reuse, Raymond L. Montgomery and Michael R. Palermo, DIEE:Jan 76:529
Proposed Standards: Land Disposal of Effluents, John V. Betz, CE:May 75:77

Wastewater

Characteristics of Rural Household Wastewater., Robert Siegrist, Michael Witt and William C. Boyle, EE3:June 76:533:12200
Decisions About Wastewater Technology, 1800-1932, Joel A. Tarr and Francis Clay McMichael, Preprint No.2792, Sept 76, 30pp.
Dynamic Programming Model for Wastewater Plant Investment, John M. Armstrong, EE5:Oct 76:985: 12466
Fate of Wastewater Phosphorus in Soil, Carl G. Enfield and Bert E. Bledsoe, IR3:Sept 75:145:11593
Impact on Marine Benthos of Waste Water Discharge, Gerald T. Orlob and Dennis A. O'Leary, Preprint No.2658, Apr 76, 25pp.
Intermittent Sand Filtration of Household Wastewater, David K. Sauer, William C. Boyle and Richard J. Otis, EE4:Aug 76:789:12295
Land-Use Model for Service Area Projection, Peter M. Meier, EE1:Feb 76:71:11932
Management Model for Wastewater Disposal on Land, A. Koenig and Daniel P. Loucks, IR76:July 76:321
Management of Waste Fluids in Salaquifers, Raphael G. Kazmann, Oscar K. Kimbler and Walter R. Whitehead, IR4:Dec 74:413:10991
A Model for Trace Metals from Marine Outfalls, T. J. Hendricks, OE75:June 75:1353
Ocean Disposal of Waste Workshop, Donald J. Baumgartner and Robert B. Biggs, OE75:June 75: 1357
Optimal Design of Chlorination Systems, Madhav L. Tikhe, EE5:Oct 76:1019:12487
Optimal Design of Wastewater Collection Systems, J. M. Gupta, S. K. Agarwal and P. Khanna, EE5:Oct 76:1029:12479
Phosphorus Model of Muskegon Wastewater System, Carl G. Enfield and Lowell E. Leach, EE6:Dec 75: 911:11775
Virus Sampling in Wastewater—Field Experiences, Robert P. Miele and Michael W. Selna, Preprint No.2724, Apr 76, 30pp.
Wastewater Disposal by Submerged Manifolds, Paul Liseth, HY1:Jan 76:1:11839

Wastewater Disposal

Management Model for Wastewater Disposal on Land, A. Koenig and Daniel P. Loucks, IR76:July 76:321
Recycling Allows Zero Wastewater Discharge, Lloyd A. Dove, CE:Feb 75:48
Thermoelastic/Plastic Analysis in Rock Mechanics, William G. Pariseau, NMG:June 76:II-1168

Trace Metals in Open Water Disposal of Dredged Material, Kenneth Y. Chen, James C.S. Lu and Amancio Z. Sycip, WW4:Nov 76:443:12546
Wastewater Disposal by Submerged Manifolds, Paul Liseth, HY1:Jan 76:1:11839
Wastewater Storage-Simulation of Instream Effects, John S. Tapp, EE6:Dec 76:1151:12601

Wastewater Treatment
Analysis of Regional Waste Treatment Systems, Dennis W. Weeter and James G. Belardi, TN: EE1: Feb 76:233:11883
Decisions About Wastewater Technology, 1800-1932, Joel A. Tarr and Francis Clay McMichael, Preprint No.2792, Sept 76, 30pp.
Highly Energy Efficient — Wilton Wastewater Treatment Plant, Douglas A. Wilke and David R. Fuller, CE:May 76:70
Intermittent Sand Filtration of Household Wastewater, David K. Sauer, William C. Boyle and Richard J. Otis, EE4:Aug 76:789:12295
Management Model for Wastewater Disposal on Land, A. Koenig and Daniel P. Loucks, IR76:July 76:321
Operation Scarlift — Mine Drainage Abatement, Clifford H. McConnell, Donald E. Fowler and Andrew E. Friedrich, Preprint No.2770, Sept 76, 30pp.
Optimization of Denitrification Process, Richard P. Michael and William J. Jewell, EE4:Aug 75:643: 11532
Productivity and the Construction Grants Program for Wastewater Treatment Works: An EPA View, Harold P. Cahill, Jr., PROD:Aug 76:205
A Promising New Process for Removing Heavy Metals from Wastewater, CE:Oct 76:78
Stochastic Analysis of Trickling Filter, Khurshed J. Mistry and David M. Himmelblau, EE3:June 75: 333:11362
Virus Sampling in Wastewater—Field Experiences, Robert P. Miele and Michael W. Selna, Preprint No.2724, Apr 76, 30pp.
Wastewater Ozonation: A Process Whose Time Has Come, Harvey M. Rosen, CE:Mar 76:65
Wastewater Recycling: Coupling Aquatic and Land Irrigation Systems, Darrell L. King and Thomas G. Bahr, IR76:July 76:128

Wastewater Use
Design of Integrated Approach to Nutrient Removal, David L. Eisenhauer, Ronald B. Sieger and Denny S. Parker, EE1:Feb 76:37:11906
Effluent Irrigation of Pearl Millet, Allen R. Overman, EE2:Apr 75:193:11233
Effluent Irrigation of Rye and Ryegrass, Allen R. Overman and Hsiao-Ching Ku, EE2:Apr 76:475: 12035
Health Considerations in Use of Tertiary Effluents, Robert C. Cooper, Preprint No.2723, Apr 76, 18pp.
Lime Recovery and Reuse in Primary Treatment, Denny S. Parker, Geoffrey A. Carthew and Gerry A. Horstkotte, EE6:Dec 75:985:11789
Session IV — Waste Products, Stephen K. Breslauer, EFEEC:Aug 75:414
Wasterwater Reclamation and Recharge, Bay Park, N.Y., John Vecchioli, James A. Oliva, Stephen E. Ragone and Henry F.H. Ku, EE2:Apr 75:201:11232
Wastewater Recycling: Coupling Aquatic and Land Irrigation Systems, Darrell L. King and Thomas G. Bahr, IR76:July 76:128
Wastewater Reuse Aspects of Energy Complexes, Stanley J. Dea, EFEEC:Aug 75:171

Water
Chlorine Disinfection of Low Temperature Waters, Leroy C. Reid, Jr. and Dale A. Carlson, EE2:Apr 74:339:10443
Economics of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO2:Nov 76:147:12515
Effect of Media Intermixing on Dual Media Filtration, John L. Cleasby and Gary D. Sejkora, EE4:Aug 75:503:11528
Effect of Snow Cover on Upward Movement of Soil Moisture, Eugene L. Peck, IR4:Dec 74:405:10989
Equivalent Pipe Methods for Optimizing Water Networks--Facts and Fallacies, Pramod K. Swamee and P. Khanna, EE1:Feb 74:93:10375
Functions to Predict Optimal Irrigation Programs, J. Ian Stewart, Robert M. Hagan and William O. Pruitt, IR2:June 74:179:10626
Heat Transfer in Soil-Water-Ice Systems, Aditya Mohan, GT2:Feb 75:97:11123
Kansas City Bank Tower Features Water-Filled Columns, Exposed Spandrels, CE:Jan 76:58
Legal Perspective on Water Quality Management, Douglas R. Blazey, HY5:May 75:595:11320
The Recycling of a River, Kenneth R. Wright and William C. Taggart, CE:Nov 76:42
Thermodynamic Models of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:1:11829
Water—An Element of Land-Use and Urban Growth Policies, William R. Walker and William E. Cox, UP1:Aug 76:81:12339

Water Allocation (Policy)
Water Conflicts in Western Coal Development, Theodore T. Williams, WR2:Nov 76:327:12562

Water Balance
A Subsurface Drainage Cost and Hydrologic Model, Ashim K. Bhattacharya, Nader Foroud, Sie-tan Chieng and Robert S. Broughton, Preprint No.2773, Sept 76, 18pp.

Water Circulation
Applications of Mixing Experiments to Estuaries, Robert R. Long, OE75:June 75:1400
Circulation and Surge Modeling in Pamlico Sound, N.C., Michael Amein and Damodar S. Airan, Preprint No.2665, Apr 76, 29pp.
Evaluation of Circulation in Estuaries, Karim A. Abood and Efstathios L. Bourodimos, HY9:Sept 76: 1211:12408
Porous Breakwater for Circulation Study of Harbors, G. Mavrigian and Simsek Sarikelle, OE75:June 75: 668
Renewal Characteristics of Chesapeake Bay, A. Y. Kuo, Evon P. Ruzecki and Ching S. Fang, OE75: June 75:1065
Sensitivity of Estuarine Circulation Model, John D. Wang, OE75:June 75:1035

Water Consumption
Analysis and Management of Water Distribution Systems, Hubert Demard, Bernard Bobee and Jean-Pierre Villeneuve, UP2:Nov 75:167:11679
Cost and Pricing Relationships in Water Supply, Robert M. Clark, EE2:Apr 76:361:12025
Dry-Wet Tower Evaporation and Fog Psychometrics, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:21:11828
Economics of Dry-Wet Cooling Towers, Thomas E. Croley, II, V. C. Patel and Mow-Soung Cheng, PO2:Nov 76:147:12515
Estimating Stock Water Use in Rural Water Systems, Robert S. Schulz and T. Al Austin, HY1:Jan 76:15: 11843
Intercontinental Comparison of Evaporation Estimates, Robert D. Burman, IR1:Mar 76:109: 11958
Legal Perspective on Water Quality Management, Douglas R. Blazey, HY5:May 75:595:11320
Nation's Capital Faces Critical Water Problems, CE: June 75:58
Regional Impacts from Water Consumption and Heat Disposal in River Basins and Estuaries, Edwin T. Engman, EFEEC:Aug 75:131
Water Reclamation: Technology and Public Acceptance, Ralph Stone, EE3:June 76:581:12193

Water Control
Recent Techniques in Water Diversion, Fuat Senturk, WW76:Aug 76:1476

Water Cooling
Session III — Water Supply and Cooling, David R. Helwig, EFEEC:Aug 75:412

Water Current
Dynamics of Marine Structures, Joseph P. Murtha, OE75:June 75:914
Evaluation of Circulation in Estuaries, Karim A. Abood and Efstathios L. Bourodimos, HY9:Sept 76: 1211:12408
Structural Response to Wave and Current Forces, Song S. Wu and Chi C. Tung, OE75:June 75:849
Waves and Wave Forces in the Presence of Currents, Robert A. Dalrymple, OE75:June 75:999

Water Demand
Forecasts and the Role of Alternative Futures, Richard C. Tucker, Chmn., WR2:Nov 76:365:12578
Water Supply for Energy Complexes in Water-Short Regions, Gilbert G. Stamm and Kenneth O. Kauffman, EFEEC:Aug 75:147

Water Depth
The Influence of Water Depth on Ship Motion in Oblique Waves, C. H. Kim, OE75:June 75:653
On Green's Function Techniques for Solutions of Floating Body Problems, Rong-Tai Ho and Ami Harten, OE75:June 75:939

Water Distribution
Analysis and Management of Water Distribution Systems, Hubert Demard, Bernard Bobee and Jean-Pierre Villeneuve, UP2:Nov 75:167:11679
Application of Acoustic Velocity Flowmeters, Cortland C. Lanning and Robert W. Ehrhart, Preprint No.2716, Apr 76, 19pp.
Computer Simulation of Water Distribution Networks, Claude R. Gagnon and Samuel L.S. Jacoby, TE3:Aug 75:553:11515
Cost Optimization of Rural Water Systems, Robert B. Robinson and T. Al Austin, HY8:Aug 76:1119: 12301
Design of Conduit System with Diverging Branches, Kwang-Ping Yang, Tung Liang and I-Pai Wu, HY1: Jan 75:167:11080
Equivalent Pipe Methods for Optimizing Water Networks--Facts and Fallacies, Pramod K. Swamee and P. Khanna, EE1:Feb 74:93:10375
Evaluation of Nonuniformity in Irrigation and Yield, Ivan Varlev, IR1:Mar 76:149:12003
Least Cost Design of Branched Pipe Network System, Arun K. Deb, EE4:Aug 74:821:10711
Legal Perspective on Water Quality Management, Douglas R. Blazey, HY5:May 75:595:11320
Meeting the Challenge of Constructing a Reservoir Bypass Pipeline, Duane D. Buchholz and Roger T. Menlove, Preprint No.2644, Apr 76, 19pp.
Optimization of Water Distribution Network Systems, Arun K. Deb, EE4:Aug 76:837:12343
Optimum Pipe Sizing in a Branching Irrigation System, T. Al Austin, Preprint No.2679, Apr 76, 14pp.
Philadelphia's Water System Automation Plan, Carmen F. Guarino, Joseph V. Radziul, Alan Hess, Patrick R. Cairo, Robert E. Day and John J. Smith, Jr., EE5:Oct 76:953:12473
Physical Model Study of Border-Strip Irrigation, Graham A. Jobling and A. Keith Turner, IR4:Dec 73:493:10195
Pressure Reducing Valves in Pipe Network Analysis, Roland W. Jeppson and Allen L. Davis, HY7:July 76:987:12252
Simplified Optimization of Water Supply System, Hans Jorgen Rasmusen, EE2:Apr 76:313:12026
Sparsity Oriented Analysis of Large Pipe Networks, M. Chandrashekar and K. H. Stewart, HY4:Apr 75: 341:11260
Sprinkler Uniformity Measures and Skewness, Fazal H. Chaudhry, IR4:Dec 76:425:12620
Wind, Sprinkler Patterns, and System Design, Ido Seginer and Mordekhai Kostrinsky, IR4:Dec 75: 251:11752

Water Flow
Accurate Explicit Equation for Friction Factor, Akalank K. Jain, TN: HY5:May 76:674:12129
Analysis of Flow through Vegetation, Sylvester Petryk, HY7:July 75:871:11457
Control of High Velocity Flow Into a Tidal Basin, Alex Sheydayi, WW76:Aug 76:999
Detention Storage Control Strategy Development, Harry G. Wenzel, Jr., John W. Labadie and Neil S. Grigg, WR1:Apr 76:117:12070
Discharge Equations for HS, H, and HL Flumes, Wendell R. Gwinn and Donald A. Parsons, HY1: Jan 76:73:11874
Effects of Overbank Flow in Flood Computations, Tawatchai Tingsanchali and Norbert L. Ackermann, HY7:July 76:1013:12266
Float Calibration in Intergrated-Float Techniques, Peter H. John, F. Allan Johnson and Peter Sutcliffe, HY8:Aug 76:1071:12308
Flow Characteristics of Sloping Channel Jumps, Nallamuthu Rajaratnam and Valupadas Mura Hari, HY6:June 74:731:10594
Flow Resistance in Broad Shallow Grassed Channels, Cheng-lung Chen, HY3:Mar 76:307:11994
Laboratory Experiments with Surface Runoff, Ivan Muzik, HY4:Apr 74:501:10463
Low Flow Modeling in Small Steep Watersheds, David S. Bowles and J. Paul Riley, HY9:Sept 76: 1225:12405
Multiple Linearization Flow Routing Model, Thomas N. Keefer and Raul S. McQuivey, HY7:July 74: 1031:10668
Prediction of Mixing Lengths for River Flow Gaging, Peter R.B. Ward, HY7:July 73:1069:9856
Regime Equations and Tidal Inlets, Curtis Mason, WW3:Aug 73:393:9952
Solutions to Green-Ampt Infiltration Equation, Ruh-Ming Li, Michael A. Stevens and Daryl B. Simons, IR2:June 76:239:12196
Turbulent Structure near Smooth Boundary, Paul H. Blinco and Daryl B. Simons, EM3:June 75:241: 11372
Water Quality Management and Information Systems, William D. Haseman, Arthur Z. Lieberman and Andrew B. Whinston, HY3:Mar 75: 477:11185

Water Hammer
Design of Pressure Transient Control System, Morris Driels, HY5:May 75:437:11280
Gas Release During Transient Cavitation in Pipes, C. Kranenburg, HY10:Oct 74:1383:10892
Major Junction Structure Verified by Modeling, Charles H. Lawrance and Munson W. Dowd, HY4: Apr 76:499:12066
Menabrea's Note on Waterhammer: 1858, Alexander Anderson, HY1:Jan 76:29:11831
Start-Up Performance, Hyatt-Thermalito Power Complex, Haywood G. Dewey, Jr., Robert W. Ehrhart and William H. Young, PO2:Nov 73:405: 10169
Water Hammer in Coaxial Pipe Systems, Werner Burmann, HY6:June 75:699:11374
Water Hammer in PVC and Reinforced Plastic Pipe, Gary Z. Watters, Roland W. Jeppson and Gordon H. Flammer, HY7:July 76:831:12236

Water Hyacinth
Vegetative Management of Water Hyacinths, Edward O. Gangstad, WW76:Aug 76:672

Water Influx
Dewatering Rock for Construction, George F. Sowers, GT76:Aug 76:200

Water Intakes
Perforated-Pipe Water Intake for Fish Protection, Richard T. Richards and Mark J. Hroncich, HY2: Feb 76:139:11900

Water Law
Development Versus Preservation: Legal Accommodation, William E. Cox and William R. Walker, WW76:Aug 76:161

The "Kiechel Bill:" A Misguided Attempt to Resolve Federal-State Water Rights Conflicts, D. Craig Bell, Preprint No.2652, Apr 76, 15pp.
Water Quality Law in Federal Republic of Germany, Klaus Seifert and T. Clark Lyons, WR1:Apr 76:23:12071
Your Water — How Secure?, John W. Bird, IR3:Sept 76:363:12424

Water Level Fluctuations

Constant Water Level Harbor: Memphis, Tennessee, Frank P. Palumbo, Jr., WW76:Aug 76:296
Mass Transport and Mean Water Level, Jacobus van de Kreeke, OE75:June 75:1266
Multivariable Flood Level Frequency Distribution, David L. Strelchuk, HY12:Dec 76:1737:12637
Public Participation in Great Lakes Water Levels Regulation: Further Findings from the Public Hearing Held by the I.J.C. in 1973, A. P. Grima and C. Dufournaud, IR76:July 76:418

Water Levels

Constant Water Level Harbor: Memphis, Tennessee, Frank P. Palumbo, Jr., WW76:Aug 76:296
Mass Transport and Mean Water Level, Jacobus van de Kreeke, OE75:June 75:1266
Predicting Cavitation in Sudden Enlargements, James W. Ball, J. Paul Tullis and Travis Stripling, HY7:July 75:857:11442
Pressure Effects on Great Lakes Vertical Control, Frank H. Quinn, SU1:Dec 76:31:12605
Public Participation in Great Lakes Water Levels Regulation: Further Findings from the Public Hearing Held by the I.J.C. in 1973, A. P. Grima and C. Dufournaud, IR76:July 76:418

Water Loss

Estimating Seepage Losses from Canal Systems, Robert V. Worstell, IR1:Mar 76:137:11960
Intercontinental Comparison of Evaporation Estimates, Robert D. Burman, IR1:Mar 76:109:11958

Water Management (Applied)

Augmentation of 1968-1972 Winter Storms in New Mexico, Conrad G. Keyes, Jr., HY12:Dec 76:1725:12616
Coastal Management: Impact on the Ocean Engineer, Francis X. Cameron, OE75:June 75:1451
Comprehensive Water Quality Management Planning, Kenneth A. Bartal and Leonardo V. Gutierrez, Jr., HY4:Apr 75:371:11263
Development Versus Preservation: Legal Accommodation, William E. Cox and William R. Walker, WW76:Aug 76:161
Geomorphic Thresholds: An Approach to River Management, Stanley A. Schumm and R. Michael Beathard, WW76:Aug 76:707
The Goals of Water Resources Planning and Management, Carl H. Gaum, Preprint No.2719, Apr 76, 17pp.
Ground-Water's Role in Water Quality Management, John O. Osgood, HY3:Mar 75:517:11159
Irrigation Management for Salt Control, Jan van Schilfgaarde, Leon Bernstein, James D. Rhoades and Stephen L. Rawlins, IR3:Sept 74:321:10822
Land Use and Water Quality in New York Rivers, Douglas A. Haith, EE1:Feb 76:1:11902
Low Flow Criteria for Diversions and Impoundments, Sie Ling Chiang and Fred W. Johnson, WR2:Nov 76:227:12553
Mathematical Model of the Bicol River System (Luzon, Philippines), Armando Ballofet and Virgilio A. Sahagun, WW76:Aug 76:170
Mean Estimate Deficiencies in Water Quality Studies, Barry J. Adams and Robert S. Gemmell, HY7:July 75:989:11450
Nonstructural Flood Control — A Case Study, Rex A. Burns and David H. Pilgrim, WW76:Aug 76:552
Optimal Operation of Multiple Resevoir System, Dale D. Meredith, HY2:Feb 75:299:11128
Problems in Performing Environmental Assessments, Kenneth L. Dickson, David W. Kern, William F. Ruska and John Cairns, Jr., HY7:July 75:965:11463
River Water Quality: Simulation Models or Optimization Techniques, Swami Marcondes Villela, WW76:Aug 76:305
Salinity Policy for Colorado River Basin, Gaylord V. Skogerboe and Wynn R. Walker, HY8:Aug 75:1067:11510
South Platte River Flow Correlations, Robert E. Glover, IR3:Sept 75:175:11563
Storm Water Management for the Merivale Industrial Area — Township of Nepean, J. C. Anderson, IR76:July 76:593
Wastewater Reuse Aspects of Energy Complexes, Stanley J. Dea, EFEEC:Aug 75:171
Water Management in Indus River System, Riaz Nazir Tarar, WW76:Aug 76:813
Water Management Through Irrigation and Drainage: Progress, Problems, and Opportunities, Jan van Schilfgaarde, Chmn., IR2:June 74:153:10619
Water Quality Dimensions of Water Resources Planning, David H. Howells, HY2:Feb 75:277:11146
Water Quality Management for Metropolitan Kansas City, O. John Schmidt, EE6:Dec 75:935:11784
Water Quality Planning Strategy, George R. Grantham and Thomas E. Bailey, WR1:Apr 76:11:12060
208: A Process for Water Quality Management, Mark A. Pisano, CE:Nov 76:55

Water Plans

Development of Storm Drainage Cost Functions, Neil S. Grigg and John P. O'Hearn, HY4:Apr 76:515:12069
Economic Crisis of the 1930's and Water Resources Planning (Abstract), Marion E. Marts, Preprint No.2754, Sept 76, 2pp.
Economics and Water Resources Planning in America: 1776-1976, L. Douglas James and Jerry R. Rogers, Preprint No.2754, Sept 76, 30pp.
Education and Training in Water Resources Planning, Alvin S. Goodman, WR2:Nov 76:209:12555
Engineers and Public Participation in Water Resources Development, Edward Silberman, Preprint No.2668, Apr 76, 22pp.
Forecasts and the Role of Alternative Futures, Richard C. Tucker, Chmn., WR2:Nov 76:365:12578
The Goals of Water Resources Planning and Management, Carl H. Gaum, Preprint No.2719, Apr 76, 17pp.
Hydrology and Water Resources Planning in America: 1776 to 1976, Ray K. Linsley, Preprint No.2754, Sept 76, 12pp.
Identifying the Publics in Water Resource Planning, Gene E. Willeke, WR1:Apr 76:137:12064
Integrating Environmental Factors Into Water Planning: An Historical Perspective, Leonard Ortolano, Preprint No.2754, Sept 76, 20pp.
Modeling Water-Related Recreation Benefits, David W. York, Lawrence W. Gahan and Benjamin C. Dysart, III, TN: WR2:Nov 76:409:12577
Multiobjective Planning: New Directions and Methodology, A. Bruce Bishop, Mac McKee, T. Ward Morgan and Rangesan Narayanan, Preprint No.2715, Apr 76, 26pp.
Objectives of Water Quality Planning, Keith S. Krause, HY3:Mar 75:471:11200
Problem of Irrigation Return Flows, Sheldon G. Boone, IR76:July 76:673
Public Involvement and Participation — Open Planning, the Way of the Future, George R. Baumli, IR76:July 76:707
Social Aspects of Planning, Gene E. Willeke, Preprint No.2754, Sept 76, 22pp.
Systems Aspects of Water Resources Planning in America: 1776 to 1976, Stephen J. Burges, Preprint No.2754, Sept 76, 34pp.
Theory and Practice of Public Participation in Planning, Gene E. Willeke, IR1:Mar 74:75:10391
Two Centuries of Water Planning: A Review of the Development of Methodology, Ray K. Linsley, Preprint No.2754, Sept 76, 10pp.
Water Planning — An Overview, Eugene W. Weber, Preprint No.2754, Sept 76, 8pp.

Water Plan Ranking and the Public Interest, Leonard Ortolano, WR1:Apr 76:35:12068
Water Resources Planning — Historical Development, Theodore M. Schad, Preprint No.2754, Sept 76, 22pp.
Water Resources Planning in America: 1776 to 1976 — Impact of Other Policies on Water Planning: Public Health, Leonard B. Dworsky and Bernard B. Berger, Preprint No.2754, Sept 76, 16pp.
Water Resources Planning — Its Recent Evolution, Harry E. Schwarz, Preprint No.2754, Sept 76, 18pp.

Water Policy
Salinity Policy for Colorado River Basin, Gaylord V. Skogerboe and Wynn R. Walker, HY8:Aug 75: 1067:11510

Water Pollution
Automatic Control of Large-Scale Combined Sewer Systems, John W. Labadie, Neil S. Grigg and Bruce M. Bradford, EE1:Feb 75:27:11115
Availability of Water for Coal Conversion, Phil Q. Gibbs, WR2:Nov 76:219:12540
Challenges in Disposal of Dredged Material, B. C. Godwin, Preprint No.2648, Apr 76, 13pp.
Chemical Models for Metals in Coastal Environments, J. J. Morgan and T. H. Sibley, OE75:June 75:1332
Chemical Reactions During Disposal Operations, Thomas H. Wakeman and Calvin C. Fong, Preprint No.2712, Apr 76, 18pp.
Chlorine Disinfection of Low Temperature Waters, Leroy C. Reid, Jr. and Dale A. Carlson, EE2:Apr 74:339:10443
Clean Air Equals Dirty Water, Donald C. Tillman and Robert C. Horii, EE1:Feb 75:87:11125
Coal Pile Leachate—Quantity and Quality Characteristics, William C. Anderson and Mark P. Youngstrom, EE6:Dec 76:1239:12626
Coastal Dispersion of Pollutants, Ryszard B. Zeidler, WW2:May 76:235:12121
Concepts in the Control of Nonpoint Water Pollution, M. H. Frere, David A. Woolhiser, J. H. Caro, B. A. Stewart and W. H. Wischmeier, Preprint No.2667, Apr 76, 24pp.
Convective Model of Longitudinal Dispersion, Raul S. McQuivey and Thomas N. Keefer, HY10:Oct 76:1409:12478
Dense Effluent Dispersion in a Stream, Henry Crew and Robert O. Reid, EM1:Feb 76:77:11915
Design of Integrated Approach to Nutrient Removal, David L. Eisenhauer, Ronald B. Sieger and Denny S. Parker, EE1:Feb 76:37:11906
Determination of Length and Direction of Ocean Outfall Diffuser at Wantagh Sewage Treatment Plant, Nassau County, New York, Wen H. Huang, OE75:June 75:1294
Dispersion—Mississippi River Below Baton Rouge, La., Raul S. McQuivey and Thomas N. Keefer, HY10:Oct 76:1425:12490
DO-Sag in Oscillating Flow, Wen-Hsiung Li and Michael Edwin Kozlowski, EE4:Aug 74:837:10713
Dredged Material Confinement Facilities as Solid-Liquid Separation Systems, Raymond J. Krizek, Joseph A. FitzPatrick and Dimitrios K. Atmatzidis, DIEE:Jan 76:609
Dredging and the Environmental Policy Act of 1969, James H. Bradley, DIEE:Jan 76:39
Dredging and the National Environmental Policy Act of1969, James H. Bradley, Preprint No.2734, Apr 76, 16pp.
Elutriation of Dredge Material in New Orleans Harbor, Charles Grimwood and Terence J. McGhee, WW76:Aug 76:476
Emergency Protection for Flood Damaged Streams, Donald W. Shanklin, IR76:July 76:85
Energy and Pollution Concerns in Dredging, Adolph W. Mohr, WW4:Nov 75:405:11733
Energy-Wastewater Treatment and Solids Disposal, William F. Garber, George T. Ohara and Sagar K. Raksit, EE3:June 75:319:11357
Environmental Baseline Study on the Continental Shelf off the New York Bight, Geraldine V. Cox, Preprint No.2655, Apr 76, 20pp.
Environmental Design for Istanbul Sewage Disposal, Charles G. Gunnerson, EE1:Feb 74:101:10343
Equalization of Flow Variations in Combined Sewers, Lars-Eric Janson, Stein Bendixen and Anders Harlaut, EE6:Dec 76:1139:12596
Evaluation of the Factors Influencing the Results of the Elutriate Test for Dredged Material Disposal Criteria, G. Fred Lee, Jose M. Lopez and M. D. Piwoni, DIEE:Jan 76:253
Evolution of 208 Water-Quality Planning, Leon G. Billings, CE:Nov 76:54
Fate of Wastewater Bacteria and Viruses in Soil, Charles P. Gerba, Craig Wallis and Joseph L. Melnick, IR3:Sept 75:157:11572
Federal-State Relations in Water Quality Planning, Michael S. Alushin, HY3:Mar 75:523:11160
Flow of Pollutants through a Lock, Edwin P. Russo, TN: WW2:May 76:267:12096
Gross Parameter Solutions of Jets and Plumes, Klas Cederwall, HY5:May 75:489:11285
Ground-Water Pollution Near a Landfill, William E. Kelly, EE6:Dec 76:1189:12609
Hydraulics of Surface Buoyant Jet, Frank Engelund, HY9:Sept 76:1315:12409
Impact of Energy Complexes on Freshwater Environments, Loren D. Jensen, EFEEC:Aug 75: 235
Impact of Public Law 92-532 on Dredging and Disposal, Kenneth S. Kamlet, DIEE:Jan 76:49
Infiltration-Inflow Analysis, David J. Cesareo and Richard Field, EE5:Oct 75:775:11645
Influence of Equivalent Sand Roughness on the Dispersion Coefficient in Laboratory and Natural Streams, Ho-Shong Hou and Bent A. Christensen, WW76:Aug 76:1179
International Law and Superport Development, Amos C. Dawson, OE75:June 75:1462
Investigation of the Elutriate Test, Thomas P. O'Connor, DIEE:Jan 76:299
Irrigation Management Decisions for Minimizing Nitrate Leaching, A. S. Dylla, D. R. Timmons and Hollis Shull, IR76:July 76:168
Lead Analysis in Dredge Spoil Elutriates, Walter G. Cox, DIEE:Jan 76:242
Legal-Institutional Framework for the Continental Shelf, Paul O. Bleecker, OE75:June 75:1437
Legal Perspective on Water Quality Management, Douglas R. Blazey, HY5:May 75:595:11320
Longitudinal Dispersion Coefficients for Streams, Subhash C. Jain, EE2:Apr 76:465:12037
Management Model for Wastewater Disposal on Land, A. Koenig and Daniel P. Loucks, IR76:July 76:321
Marine Sediment Pollution Study by Electric Conductivity Method, Mian-Chang Wang, David H. Killoy and Vito A. Nacci, Preprint No.2664, Apr 76, 19pp.
Modeling of Coastal Dredged Material Disposal, Stuart P. Bowen, DIEE:Jan 76:202
Modern Trends in Dredge Design, Thomas M. Turner, DIEE:Jan 76:173
Monitoring Sludge Disposal — Mid-Atlantic Shelf, Geraldine V. Cox, Steven A. Townsend and Priya Wickramarante, OE75:June 75:1314
New Instruments for Studying Ocean Pollution, Willard Bascom, Preprint No.2721, Apr 76, 13pp.
Nonpoint Source Pollution from Agricultural Runoff, Douglas A. Haith and John V. Dougherty, EE5:Oct 76:1055:12481
Nonpoint Sources of Pollution: A Federal Perspective, Mark A. Pisano, EE3:June 76:555: 12211
Ocean Disposal of Waste Workshop, Donald J. Baumgartner and Robert B. Biggs, OE75:June 75: 1357
The Oceans and American Policy, Thomas A. Clingan, Jr., OE75:June 75:1490
Operation Scarlift — Mine Drainage Abatement, Clifford H. McConnell, Donald E. Fowler and Andrew E. Friedrich, Preprint No.2770, Sept 76, 30pp.

Phosphorus Uptake by Biological Slimes, Alphonse E. Zanoni, EE6:Dec 76:1229:12621
Planning for Water Quality: 1776 to 1976, Donald L. Hey and W. Henry Waggy, Preprint No.2754, Sept 76, 16pp.
Pollutional Analysis of Combined Sewer Systems, Oddvar Georg Lindholm, EE2:Apr 76:301:12030
Pollution Prediction Model of Long Island Sound, Malcolm J. Bowman, OE75:June 75:1084
Polyethylene Pipe Solutions to Sewer Outfalls, Donald R. Wells, CE:Sept 76:62
Population Balance Use in Dilute Impurity Problems, John D. Stevens and Paul M. Schierholz, EE2:Apr 76:337:12034
Porous Breakwater for Circulation Study of Harbors, G. Mavrigian and Simsek Sarikelle, OE75:June 75:668
Prediction of Mixing Lengths for River Flow Gaging, Peter R.B. Ward, HY7:July 73:1069:9856
Private Constraints on Ground-Water Contamination, William R. Walker and William E. Cox, HY10:Oct 75:1333:11665
Quality of Irrigation Water and Surface Drainage, Johannes C. Guitjens, W. W. Miller and C. N. Mahannah, IR76:July 76:117
Quarantine Island Disposal Plan, George Marsch, DIEE:Jan 76:579
Radial Dispersion in Ground-Water Flow, Bruce W. Hunt, EM6:Dec 74:1117:10998
Recommendations for Environmental Engineering Education, Wesley O. Pipes, EE2:Apr 74:243:10459
Removal of Heavy Metals from Industrial Effluents, Jim V. Rouse, EE5:Oct 76:929:12447
River and Cooling Water Temperature Fluctuations, Heinz Stefan and V. Nguyen Chau, HY11:Nov 76:1613:12514
Sediment Transport in a South Carolina Mountain Stream, Benjamin C. Dysart, III and Charles H. Langdon, III, IR76:July 76:56
Session III — Water Supply and Cooling, David R. Helwig, EFEEC:Aug 75:412
Session IV — Waste Products, Stephen K. Breslauer, EFEEC:Aug 75:414
Sewage Effluent Turned to Snow: Provides Storage, Removes Pollutant, Kenneth R. Wright, CE:May 76:88
Shin-Shen Canal Diversion Structure — Taipei, Taiwan, Richard R. Deussen, WW76:Aug 76:1459
Simple Method for Predicting Dispersion in Streams, Raul S. McQuivey and Thomas N. Keefer, EE4:Aug 74:997:10708
Simulation of Agricultural Runoff, Anthony S. Donigian, Jr. and Norman H. Crawford, Preprint No.2670, Apr 76, 27pp.
Simulation of Quality of Urban Drainage Effluents, Jiri Marsalek, IR76:July 76:564
Solid Particle Settlement in Open-Channel Flow, Ruh-Ming Li and Hsieh W. Shen, HY7:July 75:917:11460
Solid Waste Management at Energy Complexes, David R. Berg, EFEEC:Aug 75:201
Solution for Radial-Flow with Nonlinear Adsorption, Surendra P. Gupta and Robert A. Greenkorn, EE1:Feb 76:87:11901
Some Thoughts on Zero Discharge, Paul Fleming, EI2:Apr 76:179:12082
Statistical Evaluation of Reaeration Prediction Equations, Linfield C. Brown, EE5:Oct 74:1051:10849
Status of NOAA's Ocean Dumping Research in the New York Bight, R. Lawrence Swanson, Preprint No.2690, Apr 76, 30pp.
Three-Dimensional Pollutant Modeling in Shear Flow, Gour-Tsyh Yeh, HY3:Mar 76:351:12005
Transverse Dispersion in Oscillatory Channel Flow, Peter R.B. Ward, HY6:June 74:755:10589
Trouble in Paradise, Harry E. Schwarz and Maria R. Eigerman, HY5:May 75:603:11296
Ultimate Fate of Suspended Material in Estuaries, Ray B. Krone, DIEE:Jan 76:180
Urban Runoff Pollution Control—State-of-the-Art, Richard Field and John A. Lager, EE1:Feb 75:107:11129
U.S. Coast Guard's Role in Environmental Protection, William M. Devlin, Preprint No.2725, Apr 76, 10pp.
Use of Remote Sensing for Mapping Wetlands, Robert J. Reimold and Rick A. Linthurst, TE2:May 75:189:11293
US Water Cleanup Program Speeds Up—But Still Much Red Tape, Eugene E. Dallaire, CE:Aug 75:71
Vertical Temperature Profiles in Open-Channel Flow, Eric J. Schiller and William W. Sayre, HY6:June 75:749:11389
Wastewater Reuse Aspects of Energy Complexes, Stanley J. Dea, EFEEC:Aug 75:171
Water Pollution Control Goals Need to be Reassessed, CE:Feb 76:93
Water Quality Aspects of Agricultural and Urban Drainage, Philip B. Bedient and William G. Characklis, IR76:July 76:374
Water Quality Management and Information Systems, William D. Haseman, Arthur Z. Lieberman and Andrew B. Whinston, HY3:Mar 75:477:11185
Water Quality Management for Metropolitan Kansas City, O. John Schmidt, EE6:Dec 75:935:11784
Water Reclamation: Technology and Public Acceptance, Ralph Stone, EE3:June 76:581:12193
Water Resources Planning in Urban Areas, Robert L. Fulton, HY9:Sept 75:1249:11571
Waters of the United States, William L. Black, DIEE:Jan 76:10
What's New in Water Treatment?, Virginia Fairweather, CE:Sept 75:69
Wind Control of Algae Growth in Eutrophic Lakes, Heinz Stefan, Timothy Skoglund and Robert O. Megard, EE6:Dec 76:1201:12619

Water Pollution Control

Challenges in Disposal of Dredged Material, B. C. Godwin, Preprint No.2648, Apr 76, 13pp.
Concepts in the Control of Nonpoint Water Pollution, M. H. Frere, David A. Woolhiser, J. H. Caro, B. A. Stewart and W. H. Wischmeier, Preprint No.2667, Apr 76, 24pp.
Determination of Length and Direction of Ocean Outfall Diffuser at Wantagh Sewage Treatment Plant, Nassau County, New York, Wen H. Huang, OE75:June 75:1294
Environmental Baseline Study on the Continental Shelf off the New York Bight, Geraldine V. Cox, Preprint No.2655, Apr 76, 20pp.
Estimating Flow Conditions for River Models, William J. Grenney and David S. Bowles, EE4:Aug 76:693:12297
FEM Coupled with LP for Water Pollution Control, Tanehiro Futagami, Nobuyuki Tamai and Mashio Yatsuzuka, HY7:July 76:881:12244
Legislative Impact of P.L. 92-500 on Dredging, David H. Webb and Alfred P. Holmes, Jr., DIEE:Jan 76:83
Monitoring Sludge Disposal — Mid-Atlantic Shelf, Geraldine V. Cox, Steven A. Townsend and Priya Wickramarante, OE75:June 75:1314
New Instruments for Studying Ocean Pollution, Willard Bascom, Preprint No.2721, Apr 76, 13pp.
Ocean Disposal of Waste Workshop, Donald J. Baumgartner and Robert B. Biggs, OE75:June 75:1357
Operation Scarlift — Mine Drainage Abatement, Clifford H. McConnell, Donald E. Fowler and Andrew E. Friedrich, Preprint No.2770, Sept 76, 30pp.
PL 92-500 to Cost Metal Finishing Industry $45 Billion, Eugene E. Dallaire, CE:Sept 76:84
Status of NOAA's Ocean Dumping Research in the New York Bight, R. Lawrence Swanson, Preprint No.2690, Apr 76, 30pp.
U.S. Coast Guard's Role in Environmental Protection, William M. Devlin, Preprint No.2725, Apr 76, 10pp.
US Water Cleanup Program Speeds Up—But Still Much Red Tape, Eugene E. Dallaire, CE:Aug 75:71

Water Pollution Laws
US Water Cleanup Program Speeds Up—But Still Much Red Tape, Eugene E. Dallaire, CE:Aug 75:71

Waterproofing
Flood Proofing Regulations for Building Codes, Armando C. Lardieri, HY9:Sept 75:1155:11576

Water Properties
Diary of a Sick Control System, Robert L. Hardison, CE:May 75:68

Water Purification
High-Rate Water Treatment: The State-of-the-Art, Paul H. King, Robert L. Johnson, Clifford W. Randall and Glenn W. Rehberger, EE4:Aug 75:479:11531
Upflow Filter for Potable Water Production, Ben J. Haney and Stephen E. Steimle, EE4:Aug 75:489:11511

Water Quality
Analysis of Multiple Objectives in Water Quality, Yacov Y. Haimes and Warren A. Hall, HY4:Apr 75:387:11234
Analysis of Oxygen Demand of Sediments, J. Clement Burdick, III, DIEE:Jan 76:319
Challenges in Disposal of Dredged Material, B. C. Godwin, Preprint No.2648, Apr 76, 13pp.
Chemical Reactions During Disposal Operations, Thomas H. Wakeman and Calvin C. Fong, Preprint No.2712, Apr 76, 18pp.
Civil Engineering Applications of Remote Sensing, David J. Barr and Wesley P. James, TE2:May 75:279:11300
Comprehensive Water Quality Management Planning, Kenneth A. Bartal and Leonardo V. Gutierrez, Jr., HY4:Apr 75:371:11263
Cost and Pricing Relationships in Water Supply, Robert M. Clark, EE2:Apr 76:361:12025
Coupled Optimization-Simulation Water Quality Model, A. Bruce Bishop and William J. Grenney, EE5:Oct 76:1071:12452
Distribution of Toxic Heavy Metals in Marine and Freshwater Sediments, J. M. Brannon, R. M. Engler, J. R. Rose, P. G. Hunt and I. Smith, DIEE:Jan 76:455
Dredge-Fill in the Coral Reef Tract of the Northern Florida Keys, George M. Griffin, DIEE:Jan 76:768
Dredging and the Environmental Policy Act of 1969, James H. Bradley, DIEE:Jan 76:39
Dredging and the National Environmental Policy Act of1969, James H. Bradley, Preprint No.2734, Apr 76, 16pp.
Dynamic Response of Settling Basins, Sadataka Shiba and Yoriteru Inoue, EE5:Oct 75:741:11609
Emergency Protection for Flood Damaged Streams, Donald W. Shanklin, IR76:July 76:85
Engineering Challenges of Dredged Material Disposal, Robert M. Meccia, William C. Allanach and Fletcher H. Griffis, WW1:Feb 75:1:11096
Environmental Values and Water Quality Planning, Peter Richerson and Robert Johnston, HY2:Feb 75:259:11136
Estimated Indirect Cost of Urban Water Use, Charles H. Lawrance, EE4:Aug 75:517:11482
Estimating Flow Conditions for River Models, William J. Grenney and David S. Bowles, EE4:Aug 76:693:12297
Evaluation of a Bedload Sediment Sampler for USA-Canada Watershed Studies, Thomas F. Zimmie, Young S. Paik and Carsten H.L. Floess, IR76:July 76:40
Evolution of 208 Water-Quality Planning, Leon G. Billings, CE:Nov 76:54
Federal-State Relations in Water Quality Planning, Michael S. Alushin, HY3:Mar 75:523:11160
FEM Coupled with LP for Water Pollution Control, Tanehiro Futagami, Nobuyuki Tamai and Mashio Yatsuzuka, HY7:July 76:881:12244
The Floating Cover: Best Way to Cover a Finished-Water Reservoir?, Eugene E. Dallaire, CE:June 75:75
Hydraulic Dredge Spoil for Land Reclamation, Carl W. Garbe and Kuci-wu Tsai, Preprint No.2678, Apr 76, 24pp.
Hydrogeology and Water Quality Management, Ronald A. Landon, HY2:Feb 75:285:11137
Impact of Dredging on Water Quality in Grays Harbor, Washington, John M. Smith, James B. Phipps, Eugene B. Schermer and Don F. Samuelson, DIEE:Jan 76:512
Implementation of Interstate Water Quality Plan, Cecil H.J. Hull, HY3:Mar 75:495:11177
International Law and Superport Development, Amos C. Dawson, OE75:June 75:1462
Irrigation Return Flow Modeling for the Souris Loop, Richard W. Ribbens and Marvin J. Shaffer, IR76:July 76:545
Irrigation Return Flow Water Quality Analysis, Okay Cyril Igwe and T. L. Coulthard, IR76:July 76:519
Jet-Forced Circulations in Water-Supply Reservoirs, Rodney J. Sobey and Stuart B. Savage, HY12:Dec 74:1809:11026
Land-Based Modeling System for Water Quality Management Studies, Walter M. Grayman, Richard M. Males, William E. Gates and A. W. Hadder, HY5:May 75:567:11327
Land Use and Water Quality in New York Rivers, Douglas A. Haith, EE1:Feb 76:1:11902
Large-Scale Estuarine Water Quality Matrix Model, Bhaskara R. Penumalli, Robert H. Flake and E. Gus Fruh, EE1:Feb 76:191:11946
Legal-Institutional Framework for the Continental Shelf, Paul O. Bleecker, OE75:June 75:1437
Legal Perspective on Water Quality Management, Douglas R. Blazey, HY5:May 75:595:11320
Legislative Impact of P.L. 92-500 on Dredging, David H. Webb and Alfred P. Holmes, Jr., DIEE:Jan 76:83
Maintaining Water Quality in Voyageurs National Park, William H. Anderl, Preprint No.2686, Apr 76, 14pp.
Methodology for Sedimentation and Water Quality Modelling at the Humber River Mouth, Michael R. Garrett, A. Harrington, Nicholas Kouwen, A. F. Roake and Paul E. Wisner, WW76:Aug 76:650
Nonpoint Sources of Pollution: A Federal Perspective, Mark A. Pisano, EE3:June 76:555:12211
Objectives of Water Quality Planning, Keith S. Krause, HY3:Mar 75:471:11200
Ocean Disposal of Waste Workshop, Donald J. Baumgartner and Robert B. Biggs, OE75:June 75:1357
The Oceans and American Policy, Thomas A. Clingan, Jr., OE75:June 75:1490
Oxygen Depletion and Sulfate Production in Strip Mine Spoil Dams, J. H. Amend, Dinshaw N. Contractor and Chandrakant S. Desai, NMG:June 76:II-1155
Philadelphia's Water System Automation Plan, Carmen F. Guarino, Joseph V. Radziul, Alan Hess, Patrick R. Cairo, Robert E. Day and John J. Smith, Jr., EE5:Oct 76:953:12473
Planning and Implementation under Section 208, William C. Lienesch and Gerald A. Emison, WR2:Nov 76:283:12556
Planning for Water Quality: 1776 to 1976, Donald L. Hey and W. Henry Waggy, Preprint No.2754, Sept 76, 16pp.
Presenting Trends in Lake Eutrophication, Stanley Hershman and Samuel O. Russell, TN: EE6:Dec 76:1281:12638
Problem of Irrigation Return Flows, Sheldon G. Boone, IR76:July 76:673
Problems in Integrating Water Programs, Eugene T. Jensen, HY3:Mar 75:467:11202
Quality of Irrigation Water and Surface Drainage, Johannes C. Guitjens, W. W. Miller and C. N. Mahannah, IR76:July 76:117
Quarantine Island Disposal Plan, George Marsch, DIEE:Jan 76:579
Real Time Model of the Nitrogen Cycle in an Estuary, Tavit O. Najarian and Donald R.F. Harleman, Preprint No.2676, Apr 76, 30pp.

Recommendations for Environmental Engineering Education, Wesley O. Pipes, EE2:Apr 74:243:10459
Response of South Platte to Effluent Limitations, David W. Hendricks and Mark H. Bluestein, EE4: Aug 76:745:12294
River Water Quality: Simulation Models or Optimization Techniques, Swami Marcondes Villela, WW76:Aug 76:305
Role of Eddy Diffusivity in Thermocline Formation, Brian Henderson-Sellers, EE3:June 76:517:12174
Satellite Observations of Water Quality, Graham P. Harris, Robert P. Bukata and J. Edward Bruton, TE3:Aug 76:537:12300
Shooting Models for Salinity and Coliform, Benjamin J. Olufeagba and Robert H. Flake, EE1:Feb 76:95: 11939
Significance of Water Quality to Water Resources, Vernon E. Valantine, Preprint No.2673, Apr 76, 13pp.
Simulation of Agricultural Runoff, Anthony S. Donigian, Jr. and Norman H. Crawford, Preprint No.2670, Apr 76, 27pp.
Simulation of Quality of Urban Drainage Effluents, Jiri Marsalek, IR76:July 76:564
Simulation of Water Quality in Tarawera River, J. Christopher Rutherford and Michael J. O'Sullivan, EE2:Apr 74:369:10461
Simulation of Water Quality Management Policies, John W. Hyden, James A. Chisman and Hugh H. Macaulay, EE4:Aug 75:623:11524
Sprinkler Uniformity Effects on Quality of Return Flow, Ronald D. Bliesner and Lyman S. Willardson, IR76:July 76:508
Statistical Study of Phosphorus Removal in Wisconsin, Martin H. David, Frederick J. Schroeder, J. Jeffrey Peirce, Erhard F. Joeres and Daryl A. Braasch, EE2:Apr 76:433:12045
Steady-State Water Quality Modeling in Streams, Robert Willis, Donald R. Anderson and John A. Dracup, EE2:Apr 75:245:11246
Stochastic Analysis of Trickling Filter, Khurshed J. Mistry and David M. Himmelblau, EE3:June 75: 333:11362
Subsurface Drainage Related to Agronomic Factors on Brookston Clay Soil, E. F. Bolton and Frank R. Hore, IR76:July 76:221
Subsurface Versus Surface Drainage Water Quality and Environmental Impacts, E. Penkava, IR76:July 76:97
Systematic Identification of DO-BOD Model Structure, Bruce Beck and Peter Young, EE5:Oct 76:909:12461
Two-Dimensional Mathematical Water Quality Model, Brian J. Williams and Jon B. Hinwood, EE1:Feb 76:149:11947
Ultimate Fate of Suspended Material in Estuaries, Ray B. Krone, DIEE:Jan 76:180
Wastewater Recycling: Coupling Aquatic and Land Irrigation Systems, Darrell L. King and Thomas G. Bahr, IR76:July 76:128
Wastewater Storage-Simulation of Instream Effects, John S. Tapp, EE6:Dec 76:1151:12601
Water Pollution Control Goals Need to be Reassessed, CE:Feb 76:93
Water Quality and Aquitard Permeability, James H. Hardcastle and James K. Mitchell, IR2:June 76: 205:12203
Water Quality Aspects of Agricultural and Urban Drainage, Philip B. Bedient and William G. Characklis, IR76:July 76:374
Water Quality Dimensions of Water Resources Planning, David H. Howells, HY2:Feb 75:277: 11146
Water Quality Effects of a Dredging Disposal Area, Raymond J. Krizek, Brian J. Gallagher and Gabor M. Karadi, EE2:Apr 76:389:12040
Water Quality Law in Federal Republic of Germany, Klaus Seifert and T. Clark Lyons, WR1:Apr 76:23: 12071
Water Quality Management and Information Systems, William D. Haseman, Arthur Z. Lieberman and Andrew B. Whinston, HY3:Mar 75: 477:11185
Water Quality Management for Metropolitan Kansas City, O. John Schmidt, EE6:Dec 75:935:11784
Water Quality Models Using the Box-Jenkins Method, Peter M. Huck and Grahame J. Farquhar, EE3:June 74:733:10629
Water Quality Planning Strategy, George R. Grantham and Thomas E. Bailey, WR1:Apr 76:11: 12060
Water Reclamation: Technology and Public Acceptance, Ralph Stone, EE3:June 76:581:12193
Water Recreation and Benefit Estimation for Lake Livingston (Texas), Charles W. Warner, Jr., Pat B. Fowler, G. E. Munger, Jr. and Jerry R. Rogers, Preprint No.2682, Apr 76, 16pp.
Water Supplies for Low-Income Communities in Developing Countries, Richard G. Feachem, EE5: Oct 75:687:11608
Water Supply for Energy Complexes in Water-Short Regions, Gilbert G. Stamm and Kenneth O. Kauffman, EFEEC:Aug 75:147
Will Industry Meet Water-Quality Goals?, Eugene E. Dallaire, CE:Dec 75:68
208: A Process for Water Quality Management, Mark A. Pisano, CE:Nov 76:55

Water Quality Control

Mean Estimate Deficiencies in Water Quality Studies, Barry J. Adams and Robert S. Gemmell, HY7:July 75:989:11450
Salinity Policy for Colorado River Basin, Gaylord V. Skogerboe and Wynn R. Walker, HY8:Aug 75: 1067:11510
Water Rights and Water Quality Management, William R. Walker and William E. Cox, HY3:Mar 75:511:11156
Water Supplies for Low-Income Communities in Developing Countries, Richard G. Feachem, EE5: Oct 75:687:11608

Water Reclamation

Virus Sampling in Wastewater—Field Experiences, Robert P. Miele and Michael W. Selna, Preprint No.2724, Apr 76, 30pp.

Water Requirements

Development Versus Preservation: Legal Accommodation, William E. Cox and William R. Walker, WW76:Aug 76:161
Water Resources Planning — Its Recent Evolution, Harry E. Schwarz, Preprint No.2754, Sept 76, 18pp.

Water Resources

Alberta's Viewpoint on Risk, John W. Campbell, EFRLD:Sept 75:147
ASCE Urban Water Resources Research Program, Murray B. McPherson and George F. Mangan, Jr., HY7:July 75:847:11445
Aspects of Hydrological Effects of Urbanization, William J. Schneider, Chmn., HY5:May 75:449: 11301
Comprehensive Water Quality Management Planning, Kenneth A. Bartal and Leonardo V. Gutierrez, Jr., HY4:Apr 75:371:11263
Computer Use for River Regulation, Charles E. Abraham, HY2:Feb 75:291:11140
Concrete in Water Resource and Energy Development, Harold G. Arthur, Preprint No.2741, Sept 76, 30pp.
Construction of Pueblo Dam, John W. Larson, CO4: Dec 75:883:11769
Dealing with Variable Flood Hazard, Jerry A. McCrory, L. Douglas James and D. Earl Jones, Jr., WR2:Nov 76:193:12522
Detention Storage Control Strategy Development, Harry G. Wenzel, Jr., John W. Labadie and Neil S. Grigg, WR1:Apr 76:117:12070
Development of the Water Resources in the Tennessee Valley Region, Bevan W. Brown, Jr., Preprint No.2799, Sept 76, 22pp.
Diversion of Water through Northfield Mt. Pumped Storage Project, Charles W. Lockwood, WR1:Apr 76:49:12075

Economic Crisis of the 1930's and Water Resources Planning (Abstract), Marion E. Marts, Preprint No.2754, Sept 76, 2pp.
Economics and Water Resources Planning in America: 1776-1976, L. Douglas James and Jerry R. Rogers, Preprint No.2754, Sept 76, 30pp.
Education and Training in Water Resources Planning, Alvin S. Goodman, WR2:Nov 76:209:12555
Engineers and Public Participation in Water Resources Development, Edward Silberman, Preprint No.2668, Apr 76, 22pp.
The Equivalent Radius of a Source in Numerical Models of Groundwater Flow, Iichiro Kono, NMG: June 76:II-1145
Evolving National Water Policies, Gary D. Cobb, EI3:July 75:375:11427
Federal Manpower in Water Resource Engineering, Edward R. Lewandowski, WR2:Nov 76:185:12533
Federal-State Relations in Water Quality Planning, Michael S. Alushin, HY3:Mar 75:523:11160
FEM Coupled with LP for Water Pollution Control, Tanehiro Futagami, Nobuyuki Tamai and Mashio Yatsuzuka, HY7:July 76:881:12244
Flood Damage Reduction Potential of River Forecast, Harold John Day and Kwang K. Lee, WR1:Apr 76:77:12059
Flood-Hazard Effects on Residential Property Values, Leonard A. Shabman and Demetrios I. Damianos, WR1:Apr 76:151:12065
Food and Agricultural Policies, Earl O. Heady, Preprint No.2754, Sept 76, 16pp.
Forecasts and the Role of Alternative Futures, Richard C. Tucker, Chmn., WR2:Nov 76:365:12578
The Goals of Water Resources Planning and Management, Carl H. Gaum, Preprint No.2719, Apr 76, 17pp.
The Green Bay—Fox River System in Transition, Harold John Day, WW76:Aug 76:527
Ground-Water's Role in Water Quality Management, John O. Osgood, HY3:Mar 75:517:11159
Hydrology and Water Resources Planning in America: 1776 to 1976, Ray K. Linsley, Preprint No.2754, Sept 76, 12pp.
Hydrology of Patch Cuts in Lodgepole Pine, James R. Meiman and Thomas L. Dietrich, IR1:Mar 75: 41:11197
Identifying the Publics in Water Resource Planning, Gene E. Willeke, WR1:Apr 76:137:12064
Impact of Water Resources on Vector-Borne Diseases, Richard O. Hayes, WR2:Nov 76:177: 12526
Implementation of Interstate Water Quality Plan, Cecil H.J. Hull, HY3:Mar 75:495:11177
Integrating Environmental Factors Into Water Planning: An Historical Perspective, Leonard Ortolano, Preprint No.2754, Sept 76, 20pp.
Land-Based Modeling System for Water Quality Management Studies, Walter M. Grayman, Richard M. Males, William E. Gates and A. W. Hadder, HY5:May 75:567:11327
A Legal-Historical Analysis of Navigation User Charges, Peter M. Ashton, Catherine Cooper-Ruska and Leonard A. Shabman, WR1:Apr 76:89:12084
Legal Perspective on Water Quality Management, Douglas R. Blazey, HY5:May 75:595:11320
Long-Term Operation of Storage Hydro Projects, W. F. Caselton and Samuel O. Russell, WR1:Apr 76: 163:12089
Maintaining Water Quality in Voyageurs National Park, William H. Anderl, Preprint No.2686, Apr 76, 14pp.
Mathematical Model of the Bicol River System (Luzon, Philippines), Armando Ballofet and Virgilio A. Sahagun, WW76:Aug 76:170
Measuring Watershed Land-Use Changes with Airphotos, Donald B. Stafford, James T. Ligon and M. Eugene Nettles, TE1:Feb 76:117:11925
Model for Layout and Design of Sewer Systems, Larry W. Mays, Harry G. Wenzel, Jr. and Jon C. Liebman, WR2:Nov 76:385:12580
Modeling Water-Related Recreation Benefits, David W. York, Lawrence W. Gahan and Benjamin C. Dysart, III, TN: WR2:Nov 76:409:12577
Multiobjective Planning: New Directions and Methodology, A. Bruce Bishop, Mac McKee, T. Ward Morgan and Rangesan Narayanan, Preprint No.2715, Apr 76, 26pp.
National Program of Inspection of Dams — Existing Practices and Capabilities, Charles F. Corns, EFRLD:Sept 75:17
National Program of Inspection of Dams — *NATIONAL DAM INVENTORY*, Samuel H. Miles, EFRLD:Sept 75:23
Nation's Capital Faces Critical Water Problems, CE: June 75:58
New Growth Centers—A Role for the Bureau of Reclamation, Victor A. Koelzer, WR2:Nov 76:311: 12576
Numerical Solution of Unconfined Seepage Problems, W. D. Liam Finn and Erol Varoglu, NMG:June 76: III-1465
Objectives of Water Quality Planning, Keith S. Krause, HY3:Mar 75:471:11200
Operations Models for Central Valley Project, Leonard Becker, William W-G. Yeh, Dan M. Fults and Donald Sparks, WR1:Apr 76:101:12062
Optimal Control of Nitrogen Losses from Land Disposal Areas, Douglas A. Haith, EE6:Dec 73: 923:10200
Optimal Operation of Multiple Resevoir System, Dale D. Meredith, HY2:Feb 75:299:11128
Optimal Sizing of Urban Flood-Control Systems, Darryl W. Davis, HY8:Aug 75:1077:11490
Planning Water Resources Research Programs, John S. Gladwell, WR1:Apr 76:3:12072
A Practical Monthly Optimum Operations Model, Dan M. Fults, Lawrence F. Hancock and Glen R. Logan, WR1:Apr 76:63:12063
Problem of Irrigation Return Flows, Sheldon G. Boone, IR76:July 76:673
Problems in Integrating Water Programs, Eugene T. Jensen, HY3:Mar 75:467:11202
Problems in Performing Environmental Assessments, Kenneth L. Dickson, David W. Kern, William F. Ruska and John Cairns, Jr., HY7:July 75:965:11463
Public Involvement and Participation — Open Planning, the Way of the Future, George R. Baumli, IR76:July 76:707
Research Benefits in Water Resources Construction, William P. Simmons and William R. Groseclose, CO3:Sept 76:5277:12421
Research Needs Relative to Environmental Data, Byron H. Willis, HY11:Nov 75:1423:11700
Reservoir Project Environmental Study, Merwin D. Dougal and Kenneth L. Dueker, HY9:Sept 75:1257: 11578
Russia Redistributes River Flow, Norman Precoda, CE:Feb 75:72
Salinity Control and Federal Water Quality Act, Michael B. Bessler and John T. Maletic, HY5:May 75:581:11321
Screening Model for Conjunctive-Use Water Systems, Abdullatif S. Hamdan and Dale D. Meredith, HY10:Oct 75:1343:11611
Sequential Deterministic Optimization in Reservoir Operation, Thomas E. Croley, II, HY3:Mar 74:443: 10426
Significance of Water Quality to Water Resources, Vernon E. Valantine, Preprint No.2673, Apr 76, 13pp.
Social Aspects of Planning, Gene E. Willeke, Preprint No.2754, Sept 76, 22pp.
Spatial Data Analysis of Nonstructural Measures, R. P. Webb and M. W. Burnham, WW76:Aug 76:329
Spring Convention to Focus on Water, CE:Feb 76:89
Systems Aspects of Water Resources Planning in America: 1776 to 1976, Stephen J. Burges, Preprint No.2754, Sept 76, 34pp.
Theory and Practice of Public Participation in Planning, Gene E. Willeke, IR1:Mar 74:75:10391
Trouble in Paradise, Harry E. Schwarz and Maria R. Eigerman, HY5:May 75:603:11296
Water—An Element of Land-Use and Urban Growth Policies, William R. Walker and William E. Cox, UP1:Aug 76:81:12339
Water Available for Energy—Upper Colorado River Basin, Dee C. Hansen, WR2:Nov 76:341:12573

Water Conflicts in Western Coal Development, Theodore T. Williams, WR2:Nov 76:327:12562
Water Harvesting — Modern Application of an Ancient Method, Allen R. Dedrick, CE:Oct 76:86
Water Planning — An Overview, Eugene W. Weber, Preprint No.2754, Sept 76, 8pp.
Water Plan Ranking and the Public Interest, Leonard Ortolano, WR1:Apr 76:35:12068
Water Quality Dimensions of Water Resources Planning, David H. Howells, HY2:Feb 75:277:11146
Water Quality Law in Federal Republic of Germany, Klaus Seifert and T. Clark Lyons, WR1:Apr 76:23:12071
Water Quality Planning Strategy, George R. Grantham and Thomas E. Bailey, WR1:Apr 76:11:12060
Water Resources Planning — Historical Development, Theodore M. Schad, Preprint No.2754, Sept 76, 22pp.
Water Resources Planning in America: 1776 to 1976 — Impact of Other Policies on Water Planning: Public Health, Leonard B. Dworsky and Bernard B. Berger, Preprint No.2754, Sept 76, 16pp.
Water Resources Planning in Urban Areas, Robert L. Fulton, HY9:Sept 75:1249:11571
Water Resources Planning — Its Recent Evolution, Harry E. Schwarz, Preprint No.2754, Sept 76, 18pp.
Water Rights and Water Quality Management, William R. Walker and William E. Cox, HY3:Mar 75:511:11156
Weather Modification for Use in High Plains, Richard A. Schleusener and J. R. Miller, Jr., IR3:Sept 74:339:10816
2020 Hindsight; Another Fifty Years of Irrigation?, Daniel A. Dreyfus, IR2:June 75:87:11363

Water Resources Development

Economic Crisis of the 1930's and Water Resources Planning (Abstract), Marion E. Marts, Preprint No.2754, Sept 76, 2pp.
Education and Training in Water Resources Planning, Alvin S. Goodman, WR2:Nov 76:209:12555
Environmental Changes from Surface Water Development, George H. Hargreaves, IR76:July 76:298
Evolving National Water Policies, Gary D. Cobb, EI3:July 75:375:11427
Multiobjective Planning: Concepts and Methods, A. Bruce Bishop, Mac McKee, T. Ward Morgan and Rangesan Narayanan, WR2:Nov 76:239:12563
Problem of Irrigation Return Flows, Sheldon G. Boone, IR76:July 76:673
Public Involvement and Participation — Open Planning, the Way of the Future, George R. Baumli, IR76:July 76:707
Reservoir Project Environmental Study, Merwin D. Dougal and Kenneth L. Dueker, HY9:Sept 75:1257:11578

Water Resources Management

Estimating Flow Conditions for River Models, William J. Grenney and David S. Bowles, EE4:Aug 76:693:12297
Nonquantitative Methods in Water Resources Management, Rammohan K. Ragade, Keith W. Hipel and Tharakkal E. Unny, WR2:Nov 76:297:12565
Problems in Integrating Water Programs, Eugene T. Jensen, HY3:Mar 75:467:11202

Water Reuse

Cost and Pricing Relationships in Water Supply, Robert M. Clark, EE2:Apr 76:361:12025
Irrigation Tailwater Loss and Utilization Equations, Arland D. Schneider, TN: IR4:Dec 76:461:12592
Session IV — Waste Products, Stephen K. Breslauer, EFEEC:Aug 75:414
Wastewater Reuse Aspects of Energy Complexes, Stanley J. Dea, EFEEC:Aug 75:171

Water Rights

The "Kiechel Bill:" A Misguided Attempt to Resolve Federal-State Water Rights Conflicts, D. Craig Bell, Preprint No.2652, Apr 76, 15pp.
Private Constraints on Ground-Water Contamination, William R. Walker and William E. Cox, HY10:Oct 75:1333:11665
Uniformity among Weather Modification Laws, Ray Jay Davis, IR3:Sept 76:285:12379
Water Available for Energy—Upper Colorado River Basin, Dee C. Hansen, WR2:Nov 76:341:12573
Water Rights and Water Quality Management, William R. Walker and William E. Cox, HY3:Mar 75:511:11156
Your Water — How Secure?, John W. Bird, IR3:Sept 76:363:12424

Watershed Management

An Event-Based Formulation of Watershed Management, Martin M. Fogel, Lucien Duckstein and Andre Musy, IR76:July 76:349

Watersheds

Characterization and Models of the Watershed Storage Process, A. R. Rao, Pen-Chih Tao and C. Rukvichai, Preprint No.2663, Apr 76, 27pp.
Identifying Urban Flash Flooding Problems, William P. Darby and Mitchell J. Small, WR2:Nov 76:349:12571
Simulation of Agricultural Runoff, Anthony S. Donigian, Jr. and Norman H. Crawford, Preprint No.2670, Apr 76, 27pp.
Surface Runoff Hydrograph Equation, Vulli L. Gupta and Syed Afaq Moin, HY10:Oct 74:1353:10880
Use of Satellite Data in Urban Hydrologic Models, Robert M. Ragan and Thomas J. Jackson, HY12:Dec 75:1469:11790

Watersheds (Basins)

Evaluation of a Bedload Sediment Sampler for USA-Canada Watershed Studies, Thomas F. Zimmie, Young S. Paik and Carsten H.L. Floess, IR76:July 76:40
An Event-Based Formulation of Watershed Management, Martin M. Fogel, Lucien Duckstein and Andre Musy, IR76:July 76:349
The Hydrology of the Upper 12-in. (30-cm) of Well-Drained, Imperfectly Drained, and Poorly Drained Mineral Soil Profiles, Peter S. Chisholm and Robert W. Kirkness, IR76:July 76:193
Irrigation Research to Practice in Grand Valley, Gaylord V. Skogerboe, Wynn R. Walker and Robert G. Evans, IR76:July 76:19
Storm Water Management for the Merivale Industrial Area — Township of Nepean, J. C. Anderson, IR76:July 76:593
Water Quality Aspects of Agricultural and Urban Drainage, Philip B. Bedient and William G. Characklis, IR76:July 76:374

Water Shortage

Civil and Environmental Engineering Aspects of Energy Complexes, Alvin S. Goodman, Editor, EFEEC:Aug 75
Session I — Objectives (Introduction), Jan C. Philips, EFEEC:Aug 75:404
Water Supply for Energy Complexes in Water-Short Regions, Gilbert G. Stamm and Kenneth O. Kauffman, EFEEC:Aug 75:147

Water Sources

Water Movement in Soil from Trickle Source, Ahmed Y. Hachum, Jose F. Alfaro and Lyman S. Willardson, IR2:June 76:179:12204

Water Sports

Water Recreation and Benefit Estimation for Lake Livingston (Texas), Charles W. Warner, Jr., Pat B. Fowler, G. E. Munger, Jr. and Jerry R. Rogers, Preprint No.2682, Apr 76, 16pp.

Water Spreading

Hydrodynamics of Perched Mounds, Richard R. Brock, HY8:Aug 76:1083:12305

Water Storage
Wet-Wells Volumes for Multipump Systems, Gunther Goldschmidt, IR3:Sept 74:371:10830

Water Supplies
Utilization and Control of Rivers in the Southwest, George A. Whetstone, WW76:Aug 76:1149
Water Supplies for Low-Income Communities in Developing Countries, Richard G. Feachem, EE5: Oct 75:687:11608

Water Supply
Availability of Water for Coal Conversion, Phil Q. Gibbs, WR2:Nov 76:219:12540
Decisions About Wastewater Technology, 1800-1932, Joel A. Tarr and Francis Clay McMichael, Preprint No.2792, Sept 76, 30pp.
Diversion of Water through Northfield Mt. Pumped Storage Project, Charles W. Lockwood, WR1:Apr 76:49:12075
Economic Value of Dredged Material, Wyndham J. Roberts, DIEE:Jan 76:919
Environmental Systems at Walt Disney World, Arthur C. Bravo, EE6:Dec 75:887:11755
Evaporation Reduction with Reflective Covers, Keith R. Cooley and Lloyd E. Myers, IR3:Sept 73:353: 9982
Flow Control and Transients in the California Aqueduct, Haywood C. Dewey, Jr. and Welby R. Madsen, IR3:Sept 76:335:12434
Ground-Water's Role in Water Quality Management, John O. Osgood, HY3:Mar 75:517:11159
Inland Site Location in the Northeast with Emphasis on Water Supply Needs, Clarence N. Freeman and John H. Dixon, EFEEC:Aug 75:92
Interactive Simulation for Water System Dynamics, Neil S. Grigg and Maurice C. Bryson, UP1:May 75: 77:11313
Land-Use Model for Service Area Projection, Peter M. Meier, EE1:Feb 76:71:11932
Marine Ecological Impacts Associated with Power Plant Activities, B. J. Copeland and Frank N. Moseley, EFEEC:Aug 75:250
Nation's Capital Faces Critical Water Problems, CE: June 75:58
Population Balance Use in Dilute Impurity Problems, John D. Stevens and Paul M. Schierholz, EE2:Apr 76:337:12034
Session III — Water Supply and Cooling, David R. Helwig, EFEEC:Aug 75:412
Shih-Kang Dam Multi-Purpose Development Project, Walter Chin Mih, WW76:Aug 76:1630
Simplified Optimization of Water Supply System, Hans Jorgen Rasmusen, EE2:Apr 76:313:12026
Subsurface Environment—Private Property or Public Domain?, William R. Walker and William E. Cox, HY11:Nov 74:1699:10958
Use of Abandoned Gravel Pits as Spreading Grounds — Experience in Los Angeles County, Irving Sherman, IR76:July 76:461
Water and Power in the Northeast, Eugene O'Brien, Clarence N. Freeman and John H. Dixon, Preprint No.2688, Apr 76, 22pp.
Water and Power in the Northeast, Eugene O'Brien, Clarence N. Freeman and John H. Dixon, PO2: Nov 76:195:12574
Water Recreation and Benefit Estimation for Lake Livingston (Texas), Charles W. Warner, Jr., Pat B. Fowler, G. E. Munger, Jr. and Jerry R. Rogers, Preprint No.2682, Apr 76, 16pp.
Water Supply Economics, Robert M. Clark, UP1:Aug 76:213:12357
Water Supply for Energy Complexes in Water-Short Regions, Gilbert G. Stamm and Kenneth O. Kauffman, EFEEC:Aug 75:147

Water Supply Forecasting
Water Supplies for Low-Income Communities in Developing Countries, Richard G. Feachem, EE5: Oct 75:687:11608

Water Supply Systems
Cost Optimization of Rural Water Systems, Robert B. Robinson and T. Al Austin, HY8:Aug 76:1119: 12301
Estimating Stock Water Use in Rural Water Systems, Robert S. Schulz and T. Al Austin, HY1:Jan 76:15: 11843
Removal of Air from Water Lines by Hydraulic Means, Paul E. Wisner, Farrukh N. Mohsen and Nicholas Kouwen, HY2:Feb 75:243:11142
Screening Model for Conjunctive-Use Water Systems, Abdullatif S. Hamdan and Dale D. Meredith, HY10:Oct 75:1343:11611

Water Surface Profiles
Hydraulic Modeling Techniques in a Backwater Area, Phil G. Combs, Nolan K. Raphelt and James E. Foster, WW76:Aug 76:232
Spatially Varied Flow in Channel Transitions, David T.Y. Kao and S. Dean Perry, WW76:Aug 76:1551

Water Table
Drawdown in Compressible Unconfined Aquifer, Tatiana D. Streltsova, HY11:Nov 74:1601:10950
Drawdown Solutions for Simultaneous Drainage and ET, R. Wayne Skaggs, IR4:Dec 75:279:11804
The Guyon Model and the Experimental Subsurface Drainage Behaviour, Robert Lagace and Gilbert Sylvestre, IR76:July 76:229
A Subsurface Drainage Cost and Hydrologic Model, Ashim K. Bhattacharya, Nader Foroud, Sie-tan Chieng and Robert S. Broughton, Preprint No.2773, Sept 76, 18pp.

Water Tanks
Effective Column Length in Polygon Shaped Frames, Kuang-Han Chu and Robert H. Rampetsreiter, TN: ST8:Aug 76:1629:12288

Water Temperature
Determining Ambient Water Temperatures, Mark Markofsky and Roger C. Binkerd, HY3:Mar 75: 361:11171
The Dissipation of Excess Heat from Water Systems, Harvey E. Jobson, PO1:May 73:089:9702
Preoperational and Operational Hydrothermal Field Data Acquisition and Analysis, Mark Markofsky, HY12:Dec 76:1711:12597
River and Cooling Water Temperature Fluctuations, Heinz Stefan and V. Nguyen Chau, HY11:Nov 76: 1613:12514
Water-Temperature Changes Downstream from a Major Reservoir at Cannonsville, N.Y., Robert E. Fish and Nobuhiro Yotsukura, IR76:July 76:481

Water Temperature Gauges
Determining Ambient Water Temperatures, Mark Markofsky and Roger C. Binkerd, HY3:Mar 75: 361:11171

Water Transportation
Early American Riverports, Robert H. Allan, Preprint No.2783, Sept 76, 26pp.

Water Treatment
Boundary Layer Separation Concept of Settling Tanks, Yishu Chiu, EE6:Dec 74:1213:11019
Chlorine Disinfection of Low Temperature Waters, Leroy C. Reid, Jr. and Dale A. Carlson, EE2:Apr 74:339:10443
Clean Air Equals Dirty Water, Donald C. Tillman and Robert C. Horii, EE1:Feb 75:87:11125
Column Settling Tests for Flocculant Suspensions, Alphonse E. Zanoni and Marshall W. Blomquist, EE3:June 75:309:11356
Decisions About Wastewater Technology, 1800-1932, Joel A. Tarr and Francis Clay McMichael, Preprint No.2792, Sept 76, 30pp.
Extended Plain Sedimentation, Kuan M. Yao, EE3: June 75:413:11392
Flow Equalization—Plus for Wastewater Treatment Plants, Virginia Fairweather, CE:Sept 75:66

High-Rate Water Treatment: The State-of-the-Art, Paul H. King, Robert L. Johnson, Clifford W. Randall and Glenn W. Rehberger, EE4:Aug 75:479: 11531
Optimizing Flocculator Power Input, Rafael Andreu-Villegas and Raymond D. Letterman, EE2:Apr 76: 251:12032
Particles, Polymers, and Performance in Filtration, Mohammad T. Habibian and Charles R. O'Melia, EE4:Aug 75:567:11512
Philadelphia's Water System Automation Plan, Carmen F. Guarino, Joseph V. Radziul, Alan Hess, Patrick R. Cairo, Robert E. Day and John J. Smith, Jr., EE5:Oct 76:953:12473
Pilot Plant Program — Treatment of NYC Water Supply, George P. Fulton and Edward A. Bryant, CE:June 76:52
Session IV — Waste Products, Stephen K. Breslauer, EFEEC:Aug 75:414
Water Quality Management and Information Systems, William D. Haseman, Arthur Z. Lieberman and Andrew B. Whinston, HY3:Mar 75: 477:11185
Water Reclamation: Technology and Public Acceptance, Ralph Stone, EE3:June 76:581:12193
What's New in Water Treatment?, Virginia Fairweather, CE:Sept 75:69

Water Treatment Plants
Flow Equalization—Plus for Wastewater Treatment Plants, Virginia Fairweather, CE:Sept 75:66
Nation's Capital Faces Critical Water Problems, CE: June 75:58

Water Tunnels
Diversion Tunnel Capacity Without Backwater in Diverted Flow, Georgije Hajdin and Cedo Maksimovic, WW76:Aug 76:993
Flood Routing in the System of Free Surface Tunnels, Cedo Maksimovic and Miodrag Radojkovic, WW76:Aug 76:190
Planning the Tehachapi Crossing, Alfred R. Golze, HY1:Jan 75:1:11052

Water Use
An Event-Based Formulation of Watershed Management, Martin M. Fogel, Lucien Duckstein and Andre Musy, IR76:July 76:349
Forecasts and the Role of Alternative Futures, Richard C. Tucker, Chmn., WR2:Nov 76:365:12578
Modeling Water-Related Recreation Benefits, David W. York, Lawrence W. Gahan and Benjamin C. Dysart, III, TN: WR2:Nov 76:409:12577
Using Evapotranspiration Data to Favorably Influence an Irrigated Environment, E. H. Hobbs and K. K. Krogman, IR76:July 76:184

Water Vapor
Correlation Analysis of Hydrometeorological Data, Ashok N. Shahane, Daniel Thomas and Paul Bock, HY10:Oct 76:1561:12484

Water Waves
Comparison of Four Numerical Methods for Flood Routing, Roland K. Price, HY7:July 74:879:10659
Electrical Detection of Waves at Water-Air Surface, B. Vonnegut and R. Markson, OE75:June 75:1137
Extreme Wave Height Distributions Over Oceans, Herbert C.S. Thom, WW3:Aug 73:355:9939
Forces due to Nonlinear Waves on Vertical Cylinders, Harihara Raman and Paruchuri Venkatanarasaiah, WW3:Aug 76:301:12326
Gravity Waves Propagated over Permeable Bottom, Stanislaw R. Massel, WW2:May 76:111:12107
Interaction of Plane Waves with a Row of Cylinders, Bradford W. Spring and Peter L. Monkmeyer, OE75:June 75:979
Landslide Generated Water Wave Model, Donald C. Raney and H. Lee Butler, HY9:Sept 76:1269:12425
Numerical-Perturbation Methods in Numerical Mechanics, Ali Hasan Nayfeh, NMG:June 76:I-168
Prediction of Wind Wave Heights, Henry T. Falvey, WW1:Feb 74:1:10324
Quadratic Loss and Scattering of Long Waves, Chiang C. Mei, Philip L-F. Liu and Arthur T. Ippen, WW3:Aug 74:217:10754
Statistical Properties of Wave Force, Chi C. Tung, EM1:Feb 75:1:11116
Surface Shear Waves, D. Howell Peregrine, HY9:Sept 74:1215:10809
Water Wave Propagation—Linear Versus Nonlinear Theories, Joseph L. Hammack and Harvey Segur, OE75:June 75:1247
Wave Climate at Plymouth, Massachusetts, Albert L. Robitaille, OE75:June 75:1152
Wave Forces on a Submerged Hemispherical Shell, Robert A. Naftzger and Subrata K. Chakrabarti, OE75:June 75:959
Wave Transmission through Porous Structures, Ole Secher Madsen, WW3:Aug 74:169:10714

Waterways
Canal Development in Early America, Richard G. Waugh, Jr., Preprint No.2774, Sept 76, 30pp.
Engineering Challenges of Dredged Material Disposal, Robert M. Meccia, William C. Allanach and Fletcher H. Griffis, WW1:Feb 75:1:11096
Flow of Pollutants through a Lock, Edwin P. Russo, TN: WW2:May 76:267:12096
Origins of Federal Waterways Engineering, Leland R. Johnson, WW76:Aug 76:1130
Past and Future of Construction Equipment — Part I, Franklin J. Larkin and Stuart Wood, Jr., CO2: June 75:309:11391
Port of San Francisco, Robert L. Sloan, Preprint No.2783, Sept 76, 26pp.
Speed of Ships in Restricted Navigation Channels, R. Bryan Schofield, WW2:May 74:133:10539
Time-Reversed Unsteady Flow Computations in Waterways, Hsiao-Ling Chu, WW76:Aug 76:1535

Waterways (Transportation)
Constant Water Level Harbor: Memphis, Tennessee, Frank P. Palumbo, Jr., WW76:Aug 76:296
Effect of Flow Regulation on Navigation Fuel Costs, Jean-Pierre Granju and Walter O. Wunderlich, WW76:Aug 76:65
Evaluating Costs for Port Distribution Systems, Richard G. Waugh, Jr., WW4:Nov 75:385:11723
A Legal-Historical Analysis of Navigation User Charges, Peter M. Ashton, Catherine Cooper-Ruska and Leonard A. Shabman, WR1:Apr 76:89:12084
Man-Induced Changes of Middle Mississippi River, Michael A. Stevens, Daryl B. Simons and Stanley A. Schumm, WW2:May 75:119:11281
Remote Sensing of Mississippi River Characteristics, James F. Ruff, Morris M. Skinner, Brien R. Winkley, Daryl B. Simons and Dennis E. Dorratcague, WW2:May 76:189:12150
River-Ice Problems: A State-of-the-Art Survey and Assessment of Research Needs, John F. Kennedy, Cochmn. and George D. Ashton, Cochmn., HY1: Jan 74:1:10281
Thalweg Disposal of Riverine Dredged Material, Peter F. Lagasse, Daryl B. Simons and Yung H. Chen, DIEE:Jan 76:556

Waterways (Watercourses)
Flow and Bed Topography in Channel Bends, Frank Engelund, HY11:Nov 74:1631:10963
Nebraska Flood-Plain Management Program—Part II, James R. Cook, HY7:July 75:983:11438

Waterways Experiment Station
John R. Freeman and His Influence on Hydraulics, John B. Drisko, Preprint No.2767, Sept 76, 10pp.

Water Wells
Investigation of Two-Regime Well Flow, Pongsarl Huyakorn and Colin R. Dudgeon, HY9:Sept 76: 1149:12383

Waterworks
Pressure Reducing Valves in Pipe Network Analysis, Roland W. Jeppson and Allen L. Davis, HY7:July 76:987:12252

Repair of Earthquake Damaged Underground Reservoir, Daniel J. Smith, Jr., CO3:Sept 74:449: 10825
Water Hammer in PVC and Reinforced Plastic Pipe, Gary Z. Watters, Roland W. Jeppson and Gordon H. Flammer, HY7:July 76:831:12236

Water Yield
Evaluation of Nonuniformity in Irrigation and Yield, Ivan Varlev, IR1:Mar 76:149:12003
Water Yield Model Using SCS Curve Numbers, Jimmy R. Williams and William V. LaSeur, HY9: Sept 76:1241:12377

Water Yield Improvement
Hydrology of Patch Cuts in Lodgepole Pine, James R. Meiman and Thomas L. Dietrich, IR1:Mar 75: 41:11197

Wave Action
Effect of Structures on Irregular Waves Compared to Regular Waves, Yvon Ouellet and Yvon Morin, WW3:Aug 75:231:11494
Instrumentation for Wave Induced Pore Pressures, James T. Dette, Vahan Tanal and Joseph A. Fischer, OE75:June 75:355
Interaction of Water Waves with Cylinder Barrier, Stanislaw R. Massel, WW2:May 76:165:12125
Nearshore Wave Direction Gage, William R. James and Robert J. Hallermeier, WW4:Nov 76:379:12552
Quadratic Loss and Scattering of Long Waves, Chiang C. Mei, Philip L-F. Liu and Arthur T. Ippen, WW3:Aug 74:217:10754
Water Wave Propagation—Linear Versus Nonlinear Theories, Joseph L. Hammack and Harvey Segur, OE75:June 75:1247
Wave Transmission through Porous Structures, Ole Secher Madsen, WW3:Aug 74:169:10714

Wave Dispersion
The Effect of Wave Breaking on the Statistical Distribution of Wave Heights, Ching Ton Kuo, ASCE:June 75:1211
Energy Dissipation on a Rough Slope, Ole Secher Madsen and Stanley M. White, WW1:Feb 76:31: 11904
Finite Element Analysis of Wave Diffraction by a Crack, Zdenek P. Bazant, John L. Glazik, Jr. and Jan D. Achenbach, EM3:June 76:479:12220
Ocean Wave Refraction Near Reykjavik, Iceland, Thorbjorn Karlsson and J. Eliasson, OE75:June 75: 1232
Wave Energy Transfer Mechanisms in Wind-Wave Tunnels, James B. Bole, WW4:Nov 74:325:10932
Wave Motion in Rockfill, Mohamed Sameh Nasser and John A. McCorquodale, WW2:May 75:145: 11286

Wave Energy
Analysis of Offshore Concrete Caisson Dikes under Cyclic Loading, John T. Christian and Jean M.E. Audibert, NMG:June 76:II-979
Analytical Prediction of Shoreline Erosion, John S. Fisher, Leif F. Gulbrandsen and Victor M. Goldsmith, OE75:June 75:161
Breakwater Back Slope Stability, James R. Walker, Robert Q. Palmer and James W. Dunham, OE75: June 75:879
Cross-Flow Response of Piles Due to Ocean Waves, Rimas Vaicaitis, EM1:Feb 76:121:11897
Currents and Sand Transport on Beaches: A Review, Paul D. Komar, Preprint No.2707, Apr 76, 27pp.
Depth of Marine Pipeline Burial Near Shore, Melville S. Priest and Keith H. Denson, Preprint No.2636, Apr 76, 6pp.
Design Basis Flooding at Offshore Reactor Sites, Ronald M. Noble, OE75:June 75:89
Dynamics of Marine Structures, Joseph P. Murtha, OE75:June 75:914
Effect of Structures on Irregular Waves Compared to Regular Waves, Yvon Ouellet and Yvon Morin, WW3:Aug 75:231:11494
Estimation of Wave Spreading Factor and Significant Wave Direction, Nai Kuang Liang, OE75:June 75: 1124
Experience with the Offset Surfaces Breakwater, E. Douglas Sethness, Jr., Walter L. Moore and James E. Dailey, OE75:June 75:677
Forces due to Nonlinear Waves on Vertical Cylinders, Harihara Raman and Paruchuri Venkatanarasaiah, WW3:Aug 76:301:12326
Gravity Waves Propagated over Permeable Bottom, Stanislaw R. Massel, WW2:May 76:111:12107
Instrumentation for Wave Induced Pore Pressures, James T. Dette, Vahan Tanal and Joseph A. Fischer, OE75:June 75:355
Interaction of Plane Waves with a Row of Cylinders, Bradford W. Spring and Peter L. Monkmeyer, OE75:June 75:979
Longshore Currents and Sand Transport on Beaches, Paul D. Komar, OE75:June 75:334
Non-Breaking and Breaking Wave Forces on Pipelines, Robert A. Grace and Joseph Castiel, OE75:June 75:523
Nonlinear Flow of Wave Crests Past a Thin Pile, Robert J. Hallermeier, WW4:Nov 76:365:12551
Nonlinear Wave Forces on Halfcylinder and Hemisphere, Subrata K. Chakrabarti and Robert A. Naftzger, WW3:Aug 74:189:10710
Probability Analysis of Deep Water Breaking Waves, John H. Nath and Fred L. Ramsey, Preprint No.2691, Apr 76, 10pp.
Sea Cliff Base Erosion, San Diego, California, Louis J. Lee, Charles Pinckney and Charles Bemis, Preprint No.2708, Apr 76, 14pp.
Similitude in Coastal Engineering, Bernard Le Mehaute, WW3:Aug 76:317:12293
Statistical Properties of Wave Force, Chi C. Tung, EM1:Feb 75:1:11116
Structural Response to Wave and Current Forces, Song S. Wu and Chi C. Tung, OE75:June 75:849
Surface Currents in the Arctic and Sub-Arctic Seas as Deduced from Satellite Photographs of Ice Floes, Paul E. La Violette, OE75:June 75:1166
Tornado-Induced Waves in a Basin, Yong Kwun Chung and Herman Bomze, OE75:June 75:96
Transient Drainage Flow Analysis for a Coastal Site, Yung-chi Chang and Yun-jui Tsai, OE75:June 75: 1046
Wave Climate at Plymouth, Massachusetts, Albert L. Robitaille, OE75:June 75:1152
Wave Energy Transfer Mechanisms in Wind-Wave Tunnels, James B. Bole, WW4:Nov 74:325:10932
Wave Forces on a Submerged Hemispherical Shell, Robert A. Naftzger and Subrata K. Chakrabarti, OE75:June 75:959
Wave Forces on Bottom-Mounted Large-Diameter Cylinder, C. J. Garrison, Frederick H. Gehrman and Brian T. Perkinson, WW4:Nov 75:343:11699
Wave Forces on Cylinders Near Plane Boundary, Tokuo Yamamoto, John H. Nath and Larry S. Slotta, WW4:Nov 74:345:10944
Wave Forces on Large Bodies—A Survey of Numerical Methods, Jared L. Black, OE75:June 75: 924
Wave Forces on Vertical Circular Cylinder, Subrata K. Chakrabarti, Allan L. Wolbert and William A. Tam, WW2:May 76:203:12140
Wave Induced Pressures in Permeable Seabeds, Hermann Moshagen and Alf Torum, WW1:Feb 75: 49:11099
Wave Motion in Rockfill, Mohamed Sameh Nasser and John A. McCorquodale, WW2:May 75:145: 11286
Wave Period Effect on the Stability of Riprap, John P. Ahrens and Bruce L. McCartney, OE75:June 75: 1019
Waves and Wave Forces in the Presence of Currents, Robert A. Dalrymple, OE75:June 75:999

Wave Equations
Data Acquisition Methods for Coastal Currents, Paul G. Teleki, F. R. Musialowski and D. A. Prins, OE75:June 75:1190

Effects of Surface Fluctuations on Wave Field Statistics, Chi C. Tung and Keikhosrow Pajouhi, Preprint No.2705, Apr 76, 17pp.
On Kinematic Wave Approximation for Flood Routing, Ruh-Ming Li, Daryl B. Simons, Larry S. Shiao and Yung H. Chen, WW76:Aug 76:377
Statistical Properties of Wave Force, Chi C. Tung, EM1:Feb 75:1:11116
Structural Response to Wave and Current Forces, Song S. Wu and Chi C. Tung, OE75:June 75:849
Tornado-Induced Waves in a Basin, Yong Kwun Chung and Herman Bomze, OE75:June 75:96
Water Hammer in Coaxial Pipe Systems, Werner Burmann, HY6:June 75:699:11374

Wave Height
Analytical Prediction of Shoreline Erosion, John S. Fisher, Leif F. Gulbrandsen and Victor M. Goldsmith, OE75:June 75:161
Circulation and Surge Modeling in Pamlico Sound, N.C., Michael Amein and Damodar S. Airan, Preprint No.2665, Apr 76, 29pp.
Computation of Wave Heights Due to Refraction and Friction, Ove Skovgaard, Ivar G. Jonsson and Jens Aa. Bertelsen, WW1:Feb 75:15:11100
The Effect of Wave Breaking on the Statistical Distribution of Wave Heights, Ching Ton Kuo, ASCE:June 75:1211
Estimation of Wave Spreading Factor and Significant Wave Direction, Nai Kuang Liang, OE75:June 75:1124
Extremal Statistics in Ocean Engineering, Leon E. Borgman, OE75:June 75:117
Extreme Wave Height Distributions Over Oceans, Herbert C.S. Thom, WW3:Aug 73:355:9939
Extreme Wave Heights for Cleveland Harbor, D. T. Resio, OE75:June 75:62
Non-Breaking and Breaking Wave Forces on Pipelines, Robert A. Grace and Joseph Castiel, OE75:June 75:523
Ocean Wave Refraction Near Reykjavik, Iceland, Thorbjorn Karlsson and J. Eliasson, OE75:June 75:1232
Prediction of Wind Wave Heights, Henry T. Falvey, WW1:Feb 74:1:10324
Probability Analysis of Deep Water Breaking Waves, John H. Nath and Fred L. Ramsey, Preprint No.2691, Apr 76, 10pp.
Structural Response to Wave and Current Forces, Song S. Wu and Chi C. Tung, OE75:June 75:849
Water Wave Propagation—Linear Versus Nonlinear Theories, Joseph L. Hammack and Harvey Segur, OE75:June 75:1247
Water Waves Generated by Landslides in Reservoirs, D. Donald Davidson and Bruce L. McCartney, HY12:Dec 75:1489:11791
Waves of Maximum Height on Uniform Currents, Robert A. Dalrymple and Robert G. Dean, WW3:Aug 75:259:11509

Wavelength
Meandering Thalwegs in Straight Alluvial Channels, V. Miguel Ponce and Khalid Mahmood, WW76:Aug 76:1418

Wave Period
Estimation of Wave Spreading Factor and Significant Wave Direction, Nai Kuang Liang, OE75:June 75:1124
Probability Analysis of Deep Water Breaking Waves, John H. Nath and Fred L. Ramsey, Preprint No.2691, Apr 76, 10pp.
Wave Period Effect on the Stability of Riprap, John P. Ahrens and Bruce L. McCartney, OE75:June 75:1019

Wave Pile-Up
Multivariable Flood Level Frequency Distribution, David L. Strelchuk, HY12:Dec 76:1737:12637

Wave Propagation
Caisson Evaluation by Stress Wave Propagation Method, Joav Steinbach and Eben Vey, GT4:Apr 75:361:11245
Characteristics Method for Liquefaction of Soils, E. Benjamin Wylie and Victor L. Streeter, NMG:June 76:II-938
Energy Absorbing Boundary for Anisotropic Material, Somasundaram Valliappan, Weeks White and Ian K. Lee, NMG:June 76:II-1013
Explicit Finite-Difference Methods in Geomechanics, Peter Cundall, NMG:June 76:I-132
Gravity Waves Propagated over Permeable Bottom, Stanislaw R. Massel, WW2:May 76:111:12107
Nonlinear Flow of Wave Crests Past a Thin Pile, Robert J. Hallermeier, WW4:Nov 76:365:12551
One-Dimensional Soil Transients by Characteristics, E. Benjamin Wylie and Victor L. Streeter, NMG:June 76:I-151
Session 6: Soil Structure Interaction — Wave Propagation, Carl J. Costantino, STN75:Dec 75:II-203
Water Wave Propagation—Linear Versus Nonlinear Theories, Joseph L. Hammack and Harvey Segur, OE75:June 75:1247
Wave Transmission through Porous Structures, Ole Secher Madsen, WW3:Aug 74:169:10714

Wave Recorders (Water Waves)
Accelerometer Wave Recording Buoy, W. F. Baird and C. W. Glodowski, OE75:June 75:1104
Electrical Detection of Waves at Water-Air Surface, B. Vonnegut and R. Markson, OE75:June 75:1137
Ocean Wave Refraction Near Reykjavik, Iceland, Thorbjorn Karlsson and J. Eliasson, OE75:June 75:1232

Wave Runup
Wave Period Effect on the Stability of Riprap, John P. Ahrens and Bruce L. McCartney, OE75:June 75:1019

Waves
Analysis of Offshore Concrete Caisson Dikes under Cyclic Loading, John T. Christian and Jean M.E. Audibert, NMG:June 76:II-979
Analytical Prediction of Shoreline Erosion, John S. Fisher, Leif F. Gulbrandsen and Victor M. Goldsmith, OE75:June 75:161
Concrete Structures for Subsea Oil Recovery — Design Considerations, Everald V. Wright and Marcel Gerbault, Preprint No.2675, Apr 76, 21pp.
Conditional Expected Tsunami Inundation for Hawaii, Wm. Mansfield Adams, WW4:Nov 75:319:11702
Data Acquisition Methods for Coastal Currents, Paul G. Teleki, F. R. Musialowski and D. A. Prins, OE75:June 75:1190
Deep Sea Construction, S. Samuel Doughty, CO3:Sept 75:607:11575
Depth of Marine Pipeline Burial Near Shore, Melville S. Priest and Keith H. Denson, Preprint No.2636, Apr 76, 6pp.
Dimensionless Solution of Dam-Break Flood Waves, John G. Sakkas and Theodor Strelkoff, HY2:Feb 76:171:11910
The Effect of Wave Breaking on the Statistical Distribution of Wave Heights, Ching Ton Kuo, ASCE:June 75:1211
Electrical Detection of Waves at Water-Air Surface, B. Vonnegut and R. Markson, OE75:June 75:1137
Estimation of Wave Spreading Factor and Significant Wave Direction, Nai Kuang Liang, OE75:June 75:1124
Extreme Wind, Wave and Tide, Cheng Y. Yang, Mehmet Aziz Tayfun and M. H. Fallah, OE75:June 75:134
Field Performance of Permeable Breakwater, John C. Ludwick, Peter Fleischer, Ronald E. Johnson and Gerald L. Shideler, WW4:Nov 75:357:11703
Floating Plate under Wind Waves and Human Response, Masanobu Shinozuka, H. M. Hwang and E. Makitani, Preprint No.2650, Apr 76, 30pp.
Forces on Many Cylinders Near a Plane Boundary, Tokuo Yamamoto and John H. Nath, Preprint No.2633, Apr 76, 19pp.
Friction Factor under Oscillatory Waves, J. William Kamphuis, WW2:May 75:135:11292

The Influence of Water Depth on Ship Motion in Oblique Waves, C. H. Kim, OE75:June 75:653
Influence of Wave-Current Interactions on Fluid Forces, Chi C. Tung, Preprint No.2706, Apr 76, 12pp.
Interaction of Plane Waves with a Row of Cylinders, Bradford W. Spring and Peter L. Monkmeyer, OE75:June 75:979
Interaction of Water Waves with Cylinder Barrier, Stanislaw R. Massel, WW2:May 76:165:12125
Modal Analysis for Impact of Layered Plates, James T. Kubo and Richard B. Nelson, EM1:Feb 75:45:11133
Nearshore Wave Direction Gage, William R. James and Robert J. Hallermeier, WW4:Nov 76:379:12552
Non-Breaking and Breaking Wave Forces on Pipelines, Robert A. Grace and Joseph Castiel, OE75:June 75:523
Oscillations in Harbors Containing Islands, Jiin-Jen Lee, OE75:June 75:632
Partial Wave Damping in Pneumatic Breakwaters, Iver Brevik, HY9:Sept 76:1167:12374
Peak Distribution of Random Wave-Current Force, Chi C. Tung, EM5:Oct 74:873:10843
Porous Breakwater for Circulation Study of Harbors, G. Mavrigian and Simsek Sarikelle, OE75:June 75:668
The Present Perspective of Edge Waves and Coastal Dynamics, Billy L. Edge, OE75:June 75:265
Probability Analysis of Deep Water Breaking Waves, John H. Nath and Fred L. Ramsey, Preprint No.2691, Apr 76, 10pp.
Radar in Oceanography (Abstract), Duncan Ross, Paul G. Teleki and James Wiley, OE75:June 75:1169
Sea Cliff Base Erosion, San Diego, California, Louis J. Lee, Charles Pinckney and Charles Bemis, Preprint No.2708, Apr 76, 14pp.
Six-Degrees-of-Freedom Motions, Moored Ship in Waves, Basil W. Wilson, OE75:June 75:646
Study on the Wind-Wave Characteristics in Model Harbor, G. S. Liu and Frederick L.W. Tang, OE75:June 75:706
Suppression of Waves in Slotted-Walled Channel, Alfred M. Binnie, HY3:Mar 76:397:12006
Tornado-Induced Waves in a Basin, Yong Kwun Chung and Herman Bomze, OE75:June 75:96
Water Waves Generated by Landslides in Reservoirs, D. Donald Davidson and Bruce L. McCartney, HY12:Dec 75:1489:11791
Wave Climate at Plymouth, Massachusetts, Albert L. Robitaille, OE75:June 75:1152
Wave-Induced Mass Transport in Water Waves, Robert A. Dalrymple, WW2:May 76:255:12158
Wave Induced Pressures in Permeable Seabeds, Hermann Moshagen and Alf Torum, WW1:Feb 75:49:11099
Wave Induced Pressures on Submerged Plates, William W. Durgin and Jong-Chiang Shiau, WW1:Feb 75:59:11098
Waves and Wave Forces in the Presence of Currents, Robert A. Dalrymple, OE75:June 75:999
Waves of Maximum Height on Uniform Currents, Robert A. Dalrymple and Robert G. Dean, WW3:Aug 75:259:11509

Wave Spectrum

Effects of Surface Fluctuations on Wave Field Statistics, Chi C. Tung and Keikhosrow Pajouhi, Preprint No.2705, Apr 76, 17pp.
Estimation of Wave Spreading Factor and Significant Wave Direction, Nai Kuang Liang, OE75:June 75:1124
Influence of Wave-Current Interactions on Fluid Forces, Chi C. Tung, Preprint No.2706, Apr 76, 12pp.
Oceanographic Survey in Support of FNPP-AGS Site, Lloyd F. Lewis, OE75:June 75:9
Study on the Wind-Wave Characteristics in Model Harbor, G. S. Liu and Frederick L.W. Tang, OE75:June 75:706
Water Wave Propagation—Linear Versus Nonlinear Theories, Joseph L. Hammack and Harvey Segur, OE75:June 75:1247

Wave Suppressors

Suppression of Waves in Slotted-Walled Channel, Alfred M. Binnie, HY3:Mar 76:397:12006

Wave Tanks

Wave Forces on a Submerged Hemispherical Shell, Robert A. Naftzger and Subrata K. Chakrabarti, OE75:June 75:959
Wave Period Effect on the Stability of Riprap, John P. Ahrens and Bruce L. McCartney, OE75:June 75:1019

Wave Velocity

Wave Induced Pressures on Submerged Plates, William W. Durgin and Jong-Chiang Shiau, WW1:Feb 75:59:11098

Weather

Seasonal Effects on Building Construction, David Morris, CO1:Mar 76:29:11989

Weather Data

A Subsurface Drainage Cost and Hydrologic Model, Ashim K. Bhattacharya, Nader Foroud, Sie-tan Chieng and Robert S. Broughton, Preprint No.2773, Sept 76, 18pp.

Weathering

Structural Characteristics of Weathered Plywood, Michael O. Hunt and DeForest A. Matteson, Jr., ST4:Apr 76:759:12050

Weather Modification

Uniformity among Weather Modification Laws, Ray Jay Davis, IR3:Sept 76:285:12379
Weather Modification for Use in High Plains, Richard A. Schleusener and J. R. Miller, Jr., IR3:Sept 74:339:10816

Webs (Supports)

Aluminum Beam Webs Under Concentrated Loads, Maurice L. Sharp, ST76:Aug 76:569
Curvilinearly Corrugated Plates in Shear, Lung-Hsiang Wu and Charles Libove, ST11:Nov 75:2205:11714
Lateral Stability of Plane Open-Web Structures, P. C. Varghese, ST11:Nov 74:2223:10924
Shear Failure Due to Web Crushing in Prestressed Concrete I-Beams, Larp Chitnuyanondh, T. Ivan Campbell, Barrington deV. Batchelor and Paul Csagoly, T76:Aug 76:476
Tests and Analysis of Beam-to-Column Web Connections, Wai F. Chen and Glenn P. Rentschler, ST76:Aug 76:957
Trapezoidally Corrugated Plates in Shear, M. Iqbal Hussain and Charles Libove, ST5:May 76:1109:12159

Wedges

Quasi-Static Deep Penetration in Clays, Mohsen M. Baligh and Ronald F. Scott, GT11:Nov 75:1119:11706
Some Characteristics of Mechanical Wedge System, Alexander Samson, TN: EM4:Aug 76:725:12286

Weight Measurement

Acquiring Traffic Data by In-Motion Weighing, R. B. Machemehl, Clyde E. Lee and C. Michael Walton, TE4:Nov 75:681:11716

Weirs

Characteristics of Proportional Weirs, D. Chandrasekaran and Nagar S. Lakshmana Rao, HY11:Nov 76:1677:12560
Circular Jumps, Subhash C. Mehrotra, HY8:Aug 74:1133:10758
Discharge over Polygonal Weirs, Horst Indlekofer and Gerhard Rouve, HY3:Mar 75:385:11178
Discharge over Polygonal Weirs, Horst Indlekofer and Gerhard Rouve, HY3:Mar 75:385:11178
Experimental Investigation of Flow Over Side Weirs, Ahmed El-Khashab and Kenneth V.H. Smith, HY9:Sept 76:1255:12402

Flood Routing Through a Balancing Lake, Elsayed M. Elsawy and Toney Edgeley, WW76:Aug 76: 1039
Free Surface Slopes at Controls in Channel Flow, David L. Wilkinson, HY8:Aug 74:1107:10753
Gabions, Perforated Pipe and Gravel Serve as Fish Screens, Reuben E. Schmidt and Kenneth R. McSwain, CE:May 76:73
Supercritical Flow Over Sills, Karam S. Karki, HY10: Oct 76:1449:12480

Weld Defects
Photoelastic Model of Bridge Cross-Frame Junction, Alex S. Redner and Leonard Pompa, EM4:Aug 76: 659:12347

Welded Joints
Buckling of Welded Hybrid Steel I-Beams, David A. Nethercot, ST3:Mar 76:461:11965
Composite Connections to External Columns, Peter Ansourian and Jack William Roderick, ST8:Aug 76: 1609:12320
Fatigue Provisions of AASHTO Specifications, Kadir M. Kusmez and Chi C. Tung, ST9:Sept 76:1725: 12385
Fifty Years of Riveted, Bolted, and Welded Steel Construction, William E. Munse, CO3:Sept 76:437: 12399

Welding
Connections for Steel Structures — History, State of Art, and Potential Developments, John W. Fisher, Preprint No.2748, Sept 76, 21pp.
Local Buckling of Tubular Steel Columns, Alexis Ostapenko and Stephen X. Gunzelman, ST76:Aug 76:549
Problems in Long-Life Fatigue Assessment for Fixed Offshore Structures, Peter W. Marshall, Preprint No.2638, Apr 76, 24pp.
World's Third Longest Cantilever Bridge, Ichiro Konishi, CE:Feb 76:84

Well Heads
Technique to Develop Atlantic OCS Oil and Gas, W. B. Bleakley, OE75:June 75:830

Well Pumps
Wet-Wells Volumes for Multipump Systems, Gunther Goldschmidt, IR3:Sept 74:371:10830

Wells
Drawdown in Compressible Unconfined Aquifer, Tatiana D. Streltsova, HY11:Nov 74:1601:10950
The Equivalent Radius of a Source in Numerical Models of Groundwater Flow, Iichiro Kono, NMG: June 76:II-1145
Investigation of Two-Regime Well Flow, Pongsarl Huyakorn and Colin R. Dudgeon, HY9:Sept 76: 1149:12383
State-of-the-Art of Geothermal Reservoir Engineering, Patrick K. Takahashi, Bill H. Chen, Ken I. Mashima and Arthur S. Seki, PO1:July 75: 111:11455
Underground Liquid Waste Disposal, Don L. Warner, Chmn., HY3:Mar 75:421:11191
Wet-Wells Volumes for Multipump Systems, Gunther Goldschmidt, IR3:Sept 74:371:10830

Well Yield
Determining Optimal Well Discharge, Otto J. Helweg, IR3:Sept 75:201:11566
Investigation of Two-Regime Well Flow, Pongsarl Huyakorn and Colin R. Dudgeon, HY9:Sept 76: 1149:12383

Wesley W. Horner Award
Planning and Control of Combined Sewerage Systems, William R. Giessner, Robert T. Cockburn, Frank H. Moss, Jr. and Mark E. Noonan, EE4:Aug 74:1013:10744
1976 Wesley W. Horner Award Presented, CE:Oct 76:101

West Germany
German Design of Floating Concrete Structures, Richard Heinen, Preprint No.2735, Apr 76, 22pp.
Germany Constructs Steel Box Girder Landmark, Wilhelm Zellner, CE:Apr 75:61
Stress Ribbon Bridge in Freiburg, Germany, Man-Chung Tang, CE:May 76:75
Water Quality Law in Federal Republic of Germany, Klaus Seifert and T. Clark Lyons, WR1:Apr 76:23: 12071

West Virginia
Public Acceptance of New Mass Transit System, Roger B. Trent and Cooper N. Redwine, UP1:Aug 76:225:12361

Wetlands
Hydraulics of Sheet Flow in Wetlands, Bent A. Christensen, WW76:Aug 76:746

Wharves
Early Crises in the Port of Boston, James R. Cass, Jr., Preprint No.2774, Sept 76, 25pp.
Performance of a Cellular Sheetpile Wharf, Warren L. Schroeder, Dennis K. Marker and Thanasarn Khuayjarernpanishk, Preprint No.2731, Apr 76, 28pp.

Wheat
Simulation Model for Evapotranspiration of Wheat: Effect of Evaporative Conditions, Gad Strateener, Dan Yaron, Eshel Bresler and Daniel Shimshi, IR1: Mar 75:13:11169

Wheel Contact Loads
Acquiring Traffic Data by In-Motion Weighing, R. B. Machemehl, Clyde E. Lee and C. Michael Walton, TE4:Nov 75:681:11716

Wheels
Wheel Load Stress Concentrations on Crane Runway Girders, G. J.K. Asmis, ST76:Aug 76:1005

Width
Empirical Effective Width Formula, Niels C. Lind, Mayasandra K. Ravindra and Gerald Schorn, ST9: Sept 76:1741:12426

Wildlife
Impact of Public Law 92-532 on Dredging and Disposal, Kenneth S. Kamlet, DIEE:Jan 76:49

Wildlife Conservation
Protection and Enhancement of Fisheries and Wildlife Resources, F. Eugene Hester, IR76:July 76:690

Wind
Loadings and Codes for Typhoon Resistant Design, Hatsuo Ishizaki, ST10:Oct 76:2073:12496
Tornado Design Winds Based on Risk, Robert C. Garson, Jose Morla Catalan and C. Allin Cornell, ST9:Sept 75:1883:11559
"Wind Resistant Design Concepts for Residences," by Delhart B. Ward (Book Review), Herbert S. Saffir, CE:June 76:38
Windspeeds Analyses of April 3-4, 1974 Tornadoes, Kishor C. Mehta, Joseph E. Minor and James R. McDonald, ST9:Sept 76:1709:12429

Wind (Meteorology)
Circulation and Surge Modeling in Pamlico Sound, N.C., Michael Amein and Damodar S. Airan, Preprint No.2665, Apr 76, 29pp.
The Darwin Cyclone — Valuable Lesson in Structural Design, George R. Walker, Joseph E. Minor and Richard D. Marshall, CE:Dec 75:82
Design of Cooling Towers for Wind, David P. Billington and John F. Abel, ST76:Aug 76:242
Extreme Wind, Wave and Tide, Cheng Y. Yang, Mehmet Aziz Tayfun and M. H. Fallah, OE75:June 75:134

Floating Plate under Wind Waves and Human Response, Masanobu Shinozuka, H. M. Hwang and E. Makitani, Preprint No.2650, Apr 76, 30pp.
Gust Factors for Hyperbolic Cooling Towers, Mahendra P. Singh and Ajaya K. Gupta, ST2:Feb 76:371:11894
Old and New Concept of Tornadoes, T. Theodore Fujita, Preprint No.2784, Sept 76, 10pp.
Predicting Wind-Induced Response in Hurricane Zones, Bjarni V. Tryggvason, David Surry and Alan G. Davenport, ST12:Dec 76:2333:12630
Prediction of Wind Wave Heights, Henry T. Falvey, WW1:Feb 74:1:10324
Radar in Oceanography (Abstract), Duncan Ross, Paul G. Teleki and James Wiley, OE75:June 75:1169
Recent Aerodynamic Studies of Long-Span Bridges, Richard H. Gade, Harold R. Bosch and Walter Podolny, Jr., ST7:July 76:1299:12233
Risk of Wind Damage to Transmission Line Systems, Alain H. Peyrot and Tarun R. Naik, ST76:Aug 76:54
Simulation of N-Degree Stochastic Wind Force Vector for the Three-Dimensional Dynamic Analysis of Tall Buildings, P. Jayachandran and William E. Saul, ST76:Aug 76:269
Torsional Response of High-Rise Buildings, Gary C. Hart, Roger M. DiJulio, Jr. and Marshall Lew, ST2:Feb 75:397:11126
Wind Climate and Failure Risks, Emil Simiu, ST9:Sept 76:1703:12389
Wind Control of Algae Growth in Eutrophic Lakes, Heinz Stefan, Timothy Skoglund and Robert O. Megard, EE6:Dec 76:1201:12619
Wind, Sprinkler Patterns, and System Design, Ido Seginer and Mordekhai Kostrinsky, IR4:Dec 75:251:11752

Wind Forces

Equivalent Static Wind Loads for Tall Building Design, Emil Simiu, ST4:Apr 76:719:12057
Response Analysis of Tall Buildings to Wind Loadings, Rimas Vaicaitis, Masanobu Shinozuka and Masaru Takeno, ST3:Mar 75:585:11194
Response to Stochastic Wind of N-Degree Tall Buildings, William E. Saul, P. Jayachandran and Alain H. Peyrot, ST5:May 76:1059:12112
Risk of Wind Damage to Transmission Line Systems, Alain H. Peyrot and Tarun R. Naik, ST76:Aug 76:54

Window Frames

Nonlinear Panel Response to Nonstationary Wind Forces, Rimas Vaicaitis, EM4:Aug 75:333:11486

Window Glass

Window Glass Failures in Windstorms, Joseph E. Minor and W. Lynn Beason, ST1:Jan 76:147:11834

Wind Pressure

Accelerometer Wave Recording Buoy, W. F. Baird and C. W. Glodowski, OE75:June 75:1104
Adverse Wind Loading Induced by Adjacent Buildings, Jon A. Peterka and Jack E. Cermak, ST3:Mar 76:533:11980
Application of Optimal Control Theory to Civil Engineering Structures, Jann-Nan Yang, EM6:Dec 75:819:11812
Buckling of Cooling-Tower Shells: State-of-the-Art, Peter P. Cole, John F. Abel and David P. Billington, ST6:June 75:1185:11364
Buckling of Cylindrical Shells by Wind Pressure, Yung-shih Wang and David P. Billington, EM5:Oct 74:1005:10874
Cantilever Cylindrical Shells Under Assumed Wind Pressures, S. Gopalacharyulu and David J. Johns, EM5:Oct 73:943:10085
Design of Cooling Towers for Wind, David P. Billington and John F. Abel, ST76:Aug 76:242
Determination of the Missile Load for Steel Columns of a Nuclear Power Plant Structure, Zin-Tsai Shi, STN75:Dec 75:II-29
Drag Forces on Tornado Borne Missiles, James F. Costello and Willy Z. Sadeh, STN75:Dec 75:II-21
Dynamic Tornadic Wind Loads on Tall Buildings, Yi-Kwei Wen, ST1:Jan 75:169:11045
Equivalent Static Wind Loads for Tall Building Design, Emil Simiu, ST4:Apr 76:719:12057
Mean Wind Loading on Rough-Walled Cooling Towers, Cesar Farell, Oktay Guven and Federico Maisch, EM6:Dec 76:1059:12647
Nonlinear Panel Response to Nonstationary Wind Forces, Rimas Vaicaitis, EM4:Aug 75:333:11486
Old and New Concept of Tornadoes, T. Theodore Fujita, Preprint No.2784, Sept 76, 10pp.
Probability Distributions of Extreme Wind Speeds, Emil Simiu and James J. Filliben, ST9:Sept 76:1861:12381
Response of Structures to Random Wind Forces, Michael J. O'Rourke, Richard A. Parmelee and Ross B. Corotis, ST12:Dec 75:2557:11786
Risk of Wind Damage to Transmission Line Systems, Alain H. Peyrot and Tarun R. Naik, ST76:Aug 76:54
Simulation of N-Degree Stochastic Wind Force Vector for the Three-Dimensional Dynamic Analysis of Tall Buildings, P. Jayachandran and William E. Saul, ST76:Aug 76:269
Stability and Dynamic Analyses of Cooling Tower, Chang-hua Yeh and William Y.J. Shieh, PO2:Nov 73:339:10141
Stability of Cantilever Shells under Wind Loads, Prabhu S. Kundurpi, Gopalacharyulu Samavedam and David J. Johns, EM5:Oct 75:517:11612
Study on the Wind-Wave Characteristics in Model Harbor, G. S. Liu and Frederick L.W. Tang, OE75:June 75:706
Wind Climate and Failure Risks, Emil Simiu, ST9:Sept 76:1703:12389
Wind-Driven Flow of Water Influenced by a Canopy, Robert O. Reid and Robert E. Whitaker, WW1:Feb 76:61:11926
Window Glass Failures in Windstorms, Joseph E. Minor and W. Lynn Beason, ST1:Jan 76:147:11834
Wind Pressures on Buildings-Probability Densities, Jon A. Peterka and Jack E. Cermak, ST6:June 75:1255:11373

Wind Profiles

Mean Speed Profiles of Hurricane Winds, Emil Simiu, V. C. Patel and John F. Nash, EM2:Apr 76:265:12044

Wind Shear

Effect of Wind Stress on Stratified Deep Lake, Niels-Erik Ottesen Hansen, HY8:Aug 75:1037:11484
Some Features of Wind Action on Shallow Lakes, Robert B. Banks, EE5:Oct 75:813:11640

Wind Speed

Probability Distributions of Extreme Wind Speeds, Emil Simiu and James J. Filliben, ST9:Sept 76:1861:12381
Windspeeds Analyses of April 3-4, 1974 Tornadoes, Kishor C. Mehta, Joseph E. Minor and James R. McDonald, ST9:Sept 76:1709:12429

Wind Tunnel Models

Effects of Turbulence on Bridge Model Torsional Stability, Timothy A. Reinhold, Henry W. Tieleman and Francis J. Maher, ST5:May 76:1003:12118

Wind Tunnels

Drag Forces on Tornado Borne Missiles, James F. Costello and Willy Z. Sadeh, STN75:Dec 75:II-21
Torsional Flutter of Rectangular Prisms, Yasuharu Nakamura and Taketo Mizota, EM2:Apr 75:125:11226

Wind Tunnel Tests

Binary Flutter of Suspension Bridge Deck Sections, Yasuharu Nakamura and Takeshi Yoshimura, EM4:Aug 76:685:12327
Recent Aerodynamic Studies of Long-Span Bridges, Richard H. Gade, Harold R. Bosch and Walter Podolny, Jr., ST7:July 76:1299:12233

Wake Study of Stiffening Truss and Box Girder, Timothy A. Reinhold, Henry W. Tieleman and Francis J. Maher, ST9:Sept 76:1643:12372

Wire Rope
Effective Modulus of Twisted Wire Cables, George A. Costello and James W. Phillips, EM1:Feb 76: 171:11944
Research on Titanium Wire Rope for Marine Use, Darrell A. Milburn and Michael Chi, Preprint No.2713, Apr 76, 21pp.
Research on Titanium Wire Rope for Marine Use, Darrell A. Milburn and Michael Chi, ST11:Nov 76: 2137:12535

Wisconsin
Bicycle Accidents in the City of Milwaukee, Zuhair Abou-Loghd, Arun Chatterjee and Kumares C. Sinha, TE2:May 76:347:12120
Effect of Energy Shortage and Land Use on Auto Occupancy, Jahanbakhsh Behnam and Robert E. Beglinger, TE2:May 76:255:12142
Geomorphic Thresholds: An Approach to River Management, Stanley A. Schumm and R. Michael Beathard, WW76:Aug 76:707
The Green Bay—Fox River System in Transition, Harold John Day, WW76:Aug 76:527
Statistical Study of Phosphorus Removal in Wisconsin, Martin H. David, Frederick J. Schroeder, J. Jeffrey Peirce, Erhard F. Joeres and Daryl A. Braasch, EE2:Apr 76:433:12045
University of Wisconsin: A Success Story in Continuing Engineering Education, CE:Sept 75:101

Withdrawal
Selective Withdrawal Criteria of Stratified Fluids, Timothy W. Kao, HY6:June 76:717:12188

Women
Recruiting, Scholarship and Work Programs Involving Women and Minority Engineering Students at New Mexico State University, John W. Hernandez and Roger M. Zimmerman, Preprint No.2796, Sept 76, 10pp.

Wood
Inelastic Behavior of Wood Beam-Columns, Borislav D. Zakic, ST2:Feb 75:417:11145

Wooden Structures
Bibliography on Wood and Plywood Diaphragms, J. M. Carney, ST11:Nov 75:2423:11737
Finite Element Analysis of Layered Wood Systems, Erik G. Thompson, James R. Goodman and M. Daniel Vanderbilt, ST12:Dec 75:2659:11802
Hi-Rise in Wood, Frank Horner, Preprint No.2798, Sept 76, 8pp.
University of Idaho Barrel-Arch Roof Wins Outstanding Structural Engineering Award, CE: June 76:48
Wood Shear Panels Bonded with Flexible Adhesives, John A. Richards, Robert P. Kerfoot and Gordon P. Krueger, ST1:Jan 75:131:11056

Wood Products
Tension Proof Loading for Southern Pine Beams, M. Dee Strickler and Roy F. Pellerin, ST3:Mar 76:645: 11978

Wood Wastes
Reclamation of Wood-Chip Carrier Water, Joe M. Shane, Neil S. Hawthorne and Takashi Asano, EE2:Apr 75:215:11231

Work Hardening
Analysis of Shear-Induced Anisotropy in Leda Clay, K. T. Law and Kwan Y. Lo, NMG:June 76:I-329

Working Conditions
Construction Productivity — How to Improve It, CE: Oct 76:57

Work Trips
Carpools at Large Suburban Technical Center, Robert Herman and Tenny Lam, TE2:May 75:311:11332
Peak-Hour Transit Routing, Stanley D. Peterson and Eugene M. Wilson, TE4:Nov 76:847:12547
Public Response to Carpooling Programs, Alice E. Kidder, Bruce Morgan and Arthur Saltzman, TE3: Aug 76:571:12340

Worms
Maintenance Dredging and Four Polychaete Worms, James E. McCauley, Danil R. Hancock and Robert A. Parr, DIEE:Jan 76:673

Writing
Improving Your Writing, Eugene E. Dallaire, CE:Jan 75:60
Improving Your Writing — Part II, Eugene E. Dallaire, CE:Apr 75:80

Wrought Iron
Service Load and Fatigue Tests on Truss Bridges, Hotten A. Elleby, Wallace W. Sanders, Jr., F. Wayne Klaiber and M. Douglas Reeves, ST12:Dec 76:2285:12625

Yaw
Six-Degrees-of-Freedom Motions, Moored Ship in Waves, Basil W. Wilson, OE75:June 75:646
Yaw Effects on Galloping Instability, Rudolf Skarecky, EM6:Dec 75:739:11759

Yield
Buckling of Welded Hybrid Steel I-Beams, David A. Nethercot, ST3:Mar 76:461:11965
Survey of Nozzle Piping Reaction Criteria for Mechanical Equipment, Richard A. Meyer, STN75: Dec 75:II-283

Yield Equations
Collapse Load Analysis of Frames Considering Axial Forces, M. Z. Cohn and Tariq Rafay, EM4:Aug 74: 773:10757

Yield Line Method
Load Factor Design of Continuous-Span Bridges, Conrad P. Heins and Alan D. Kurzweil, ST6:June 76:1213:12219
Tests and Analysis of Beam-to-Column Web Connections, Wai F. Chen and Glenn P. Rentschler, ST76:Aug 76:957
Yield-Line Design of Slabs, Sidney H. Simmonds and Amin Ghali, ST1:Jan 76:109:11853

Younger Viewpoint
Conglomerate Takeover of Consulting Firms: An Opinion, Michael N. Goodkind, CE:Sept 75:111
CYM—Synopsis, Comments, and Suggestions, Dennis L. Tewksbury, CE:Nov 76:85
Results of Younger Member Poll, CE:June 76:84
A Short-Cut Plan to Enrich ASCE, Allen W. Hatheway, CE:Nov 75:95
The Students Speak Out, John J.P. Krol, CE:Apr 76: 99
The Students Speak Out—Part II, John J.P. Krol, CE:May 76:102

Yugoslavia
Flood Routing in the System of Free Surface Tunnels, Cedo Maksimovic and Miodrag Radojkovic, WW76:Aug 76:190

Zeta Potential
Physicochemical Approach to Water and Wastewater Filtration, Mriganka M. Ghosh, Thomas A. Jordan and Ronald L. Porter, EE1:Feb 75:71:11120

Zinc
Investigation of the Elutriate Test, Thomas P. O'Connor, DIEE:Jan 76:299

Zinc Coatings
Zinc Paint Can Save $500,000 On Your Powerplant, Dean M. Berger, CE:Oct 76:66

Zoned Embankments
Load Transfer and Hydraulic Fracturing in Zoned Dams, Fred H. Kulhawy and Thomas M. Gurtowski, GT9:Sept 76:963:12400

Zoning
Changes in the Private Sector, David Stahl, UP1:Aug 76:25:12352
Conditional Expected Tsunami Inundation for Hawaii, Wm. Mansfield Adams, WW4:Nov 75:319:11702
County Planning for Suburban Growth Management, Arnold A. Goldstein, Preprint No.2817, Sept 76, 17pp.
Effect of Building Regulations on Built Environment, Daniel L. Schodek, EI3:July 76:293:12261
Flood Proofing Regulations for Building Codes, Armando C. Lardieri, HY9:Sept 75:1155:11576
Integrated Evaluation Programs, Irving Hand, UP1:Aug 76:117:12334
Integrated Evaluation Programs for Fairfax County, Va., Jim Reid, UP1:Aug 76:137:12332
An Issue-Based Land-Use Planning Process, Stephen C. Lockwood, UP1:Aug 76:41:12341
Local Land Use Workshops Help, Murray I. Mantell, CE:Oct 75:88
Management of Connecticut River Flood Problems, S. Lawrence Dingman, WW76:Aug 76:832
Noise in the Urban Environment, Felipe U. Derteano, UP2:Nov 75:183:11688
Parking and Zoning, David K. Witheford, UP1:May 75:1:11294
Professional Engineers as Elected Local Officials, Kenneth R. Wright and Douglas T. Sovern, EI4:Oct 76:447:12504
San Antonio Ranch Case Study— National Environmental Policy Act, Robert G. Honts, UP2:Nov 75:127:11683
Scale Model Study of Los Angeles International Airport, Richard G. Cann, TE3:Aug 75:455:11489
The Seismic Regime in a Minor Earthquake Zone, G. A. Bollinger, NMG:June 76:II-917
Social Evaluation of Land-Use Controls, Morton Lustig, UP1:Aug 76:111:12356
Summary of Land-Use Policy Papers, Charles B. Notess, UP1:Aug 76:147:12330

1976 ASCE NAME INDEX

Abbey, George W.S.
Dsc, Space Call, CE:Dec 76:26

Abbott, Michael B.
Dsc, HY8: 76:1145:12280, of "Review of Models of Tidal Waters", HY11:Nov 75:1405:11693
Dsc, HY12:Dec 76:1787:12586, of "Instability in Tidal Flow Computational Schemes", HY5:May 76: 569:12100

Abdelhamid, M. Salah
At-Rest Lateral Earth Pressure of Consolidating Clay, with Raymond J. Krizek, GT7:July 76:721: 12240
See Jack L. Rosenfarb, TN: GT2:Feb 76:188:11885

Abdelnour, Jamal
See Alfredo H-S. Ang, EM4:Aug 75:373:11514

Abdel-Sayed, George
See Osman A. Marzouk, ST7:July 75:1517:11441

Abdun-Nur, Edward A.
The Quality System in Construction, EFAN:Dec 74: 2

Abel, John F.
Synthesis of Finite Element Analysis of Culverts, with James Neil Kay, NMG:June 76:tI-873
Dsc, with David P. Billington, PO2:Dec 74:209: 10976, of "Stability and Dynamic Analyses of Cooling Tower", PO2:Nov 73:339:10141
See Richard D Larrabee, ST12:Dec 74:2367:11002
See Peter P. Cole, ST6:June 75:1185:11364
See Peter P. Cole, ST6:June 75:1205:11365
See David P. Billington, ST76:Aug 76:242

Aberle, Peter P.
Pressure Grouting Foundation on Teton Dam, GT76: Aug 76:245

Abood, Karim A.
Evaluation of Circulation in Estuaries, with Efstathios L. Bourodimos, HY9:Sept 76:1211:12408

Abou-Loghd, Zuhair
Bicycle Accidents in the City of Milwaukee, with Arun Chatterjee and Kumares C. Sinha, TE2:May 76:347:12120

Abraham, Charles E.
Computer Use for River Regulation, HY2:Feb 75: 291:11140
TR:141:231

Abraham, Gerrit
Dsc, with Max Karelse, HY6:June 76:808:12164, of "Classification of Models of Tidal Waters", HY10: Oct 75:1315:11643
Dsc, with Max Karelse, HY6:June 76:808:12164, of "Review of Models of Tidal Waters", HY11:Nov 75:1405:11693

Abramowitz, Jay S.
Determination of the Natural Modes of a Complex Elastic Structure in Terms of the Natural Modes of the Unconstrained Components, ST76:Aug 76:689

Abrams, Philip
Philip Abrams Dead at 51, CE:Nov 76:84

Abtahi, Ali
Fatigue of Periodically Overloaded Stiffener Detail, with Pedro Albrecht and George R. Irwin, ST11: Nov 76:2103:12516

Achenbach, Jan D.
See Zdenek P. Bazant, EM3:June 76:479:12220

Achyuthan, Avittathur
Dsc, with Viswanatha Sethuraman, HY4:Apr 75:417: 11209, of "Flow-Induced Vibration of Vertical-Lift Gate", HY5:May 74:631:10546

Ackermann, Norbert L.
River Basin Model for Simulating Flood Control Alternatives, with Hiro Shi-igai, WW76:Aug 76:348
See Tawatchai Tingsanchali, HY7:July 76:1013:12266

Ackers, Peter
Dsc, HY4:Apr 75:420:11209, of "Transformation of Moody Diagram", HY6:June 74:797:10624

Adachi, Toshihisa
A Constitutive Equation for Normally Consolidated Clays, NMG:June 76:I-282

Adamowski, Kaz
See Martin Oosterveld, HY10:Oct 76:1491:12467

Adams, Barry J.
Mean Estimate Deficiencies in Water Quality Studies, with Robert S. Gemmell, HY7:July 75:989: 11450
TR:141:376
Dsc, EE5:Oct 75:877:11596, of "Modeling Sewage Treatment Plant Input BOD Data", EE1:Feb 75: 127:11132

Adams, E. Eric
Waste Heat Discharges from Offshore Power Plants, with Charles W. Almquist, Diane V. Ingraham and Keith D. Stolzenbach, OE75:June 75:41

Adams, Peter F.
See Brian R. Wood, ST2:Feb 76:411:11936
See Brian R. Wood, ST3:Mar 76:487:11973

Adams, Wm. Mansfield
Conditional Expected Tsunami Inundation for Hawaii, WW4:Nov 75:319:11702
Errata: WW4:Nov 76:489:12512
TR:141:470

Adham, Samy A.
See Jeremy Isenberg, PO2:Oct 72:273:9242

Adrian, Donald Dean
See Peter Kos, EE6:Dec 75:947:11781

Adrian, James J.
Modeling Method Productivity, with LeRoy T. Boyer, CO1:Mar 76:197:11983

Advani, Sunder H.
Structural Modeling of Human Head, with Raymond P. Owings, EM3:June 75:257:11386
TR:141:265

Agarwal, G. D.
See C. Venkobachar, EE2:Apr 75:268:11205

Agarwal, S. K.
See J. M. Gupta, EE5:Oct 76:1029:12479

Agent, Kenneth R.
High-Accident Spot-Improvement Program, with John A. Deacon and Robert C. Deen, TE2:May 76: 427:12123

Agerskov, Henning
High-Strength Bolted Connections Subject to Prying, ST1:Jan 76:161:11840

Agrawal, Awadh B.
Dsc, with Aftab A. Mufti, ST7:July 76:1527:12226, of "Coupled Shear Wall Analysis by Lagrange Multipliers", ST11:Nov 75:2359:11732

Agrawal, Jagdish S.
See Rowland Richards, Jr., GT6:June 74:637:10631

Agrawal, Krishna M.
See Samuel L. Lipson, ST5:May 74:865:10521

Agrawal, P. K.
Session 6: Soil Structure Interaction — Design Time-History, STN75:Dec 75:II-181
Dsc, SDNPF:Dec 73:III-52, of "Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities", SDNPF:Dec 73:III-19

Aguado, Eduardo
Optimal Pumping for Aquifer Dewatering, with Irwin Remson, Mary F. Pikul and Will A. Thomas, HY7: July 74:869:10639
Dsc: HY6:June 75:780:11340
Clo: HY11:Nov 75:1444:11672
TR:141:89

Aguilar, Antonio M.
Evaluation of Automatic Cartographic Systems for Engineering Mapping Functions, SU1:Oct 75:17: 11625
TR:141:142

Ahern, Patrick A.
See Paul E. Wisner, IR76:July 76:246

Ahlvin, Richard G.
Structural Analysis of Flexible Airfield Pavements, with Yu Tang Chou and Ronald L. Hutchinson, TE3:Aug 74:625:10727
Errata: TE3:Aug 75:592:11472
TR:141:68

Ahmad, Irshad
Revival of Inland Navigation in Pakistan, WW76:Aug 76:84

Ahmadi-Karvigh, Hassan
See Khalid Mahmood, WW76:Aug 76:564

Ahmid, Haffizudin
See Don Saylak, TE1:Feb 75:97:11106

Ahrens, John P.
Wave Period Effect on the Stability of Riprap, with Bruce L. McCartney, OE75:June 75:1019

Airan, Damodar S.
See Michael Amein, Preprint No.2665, Apr 76, 29pp.

Ajaz, Arif
Bending Test for Compacted Clays, with Richard H.G. Parry, GT9:Sept 76:929:12404
See Richard H.G. Parry, GT6:June 75:599:11339

Akagi, Tomoyuki
Viscoelastic Analysis About Deformation of Weak Ground, with Yoshinori Ito and Makoto Irobe, NMG:June 76:II-639

Akan, A. Osman
See Ben Chie Yen, WW76:Aug 76:212

Akili, Waddah
Dsc, GT1:Jan 76:115:11816, of "Creep of Sand-Ice System", GT2:Feb 75:115:11134

Akins, Mark M.
Washington Metro Access Facilities, CE:July 75:63
TR:141:297

Alam, Mohammed K.
Dsc, HY1:Jan 76:97:11817, of "River Regime with Special Reference to River Nile", HY1:Jan 75:135: 11072

Albrecht, Pedro
Dsc, ST12:Dec 76:2394:12588, of "Stress Cycles for Fatigue Design of Railroad Bridges", ST1:Jan 76: 203:11857
See Ali Abtahi, ST11:Nov 76:2103:12516

Alduvin A., Ricardo
Tentative Program for the Solution of the Sula Valley Flood Problem, WW76:Aug 76:892

Alessandri, Joseph P.
See Vern Cartwright, CE:Nov 76:60

Alfaro, Jose F.
See Ahmed Y. Hachum, IR2:June 76:179:12204

Alger, Philip L.
Learn From Biographies of Early Engineers, CE:Mar 75:90
TR:141:146

Ali, Kamil H. M.
Dsc, HY3:Mar 75:535:11148, of "Brink Depth for Trapezoidal Broad-Crested Weir", HY12:Dec 72: 2171:9427
Dsc, HY9:Sept 75:1278:11535, of "Developing Region in Self-Aerated Flows", HY4:Apr 74:553: 10501
Dsc, HY9:Sept 75:1293:11535, of "Vortex Suppression in Stilling Pond Overflow", HY11:Nov 74:1685:10969
Dsc, with Terence S. Hedges, HY12:Dec 75:1543: 11744, of "Jet-Forced Circulations in Water-Supply Reservoirs", HY12:Dec 74:1809:11026
Dsc, HY9:Sept 76:1401:12364, of "Prediction of Flow Development on Spillways", HY9:Sept 75: 1171:11581
See Richard B. Whittington, HY3:Mar 76:422:11950

Alin, Ake Ludvig
Memoir of, TR:141:538

Alkire, Bernard D.
Settlement of Thawing Embankment, with Wilbur M. Haas and James J. Botz, TN: GT8:Aug 76:877: 12287

Allan, Robert H.
Early American Riverports, Preprint No.2783, Sept 76, 26pp.

Allanach, William C.
See Robert M. Meccia, WW1:Feb 75:1:11096

Alldredge, William S.
Project Communication and the Washington Metro System, PROD:Aug 76:153

Allen, David
Dsc, ST8:Aug 75:1719:11471, of "Local and Overall Buckling of Cold-Formed Members", ST10:Oct 74: 2017:10875
Dsc, CO3:Sept 75:678:11533, of "Hardinge Bridge Span Repair", CO4:Dec 74:631:11034
Dsc, ST6:June 76:1265:12166, of "Inelastic Buckling of Simply Supported Steel I-Beams", ST7:July 75: 1333:11419
Dsc, ST6:June 76:1282:12166, of "Design of Diaphragm-Braced I-Beams", ST10:Oct 75:2045: 11615

Dsc, ST7:July 76:1521:12226, of "Inelastic Strength of Cold-Formed Steel Beams", ST11:Nov 75:2193: 11713
Dsc, ST7:July 76:1523:12226, of "Behavior of Cold-Rolled Stainless Steel Members", ST11:Nov 75: 2337:11724

Allen, Jimmy B.
Determining Needs and Benefits of an Island Port Project Under U.S. Army Corps of Engineers Regulations, WW76:Aug 76:316

Allen, John J.
Significance of Variably Confined Triaxial Testing, with Marshall R. Thompson, TE4:Nov 74:827: 10911
Dsc: Stephen F. Brown, TE4:Nov 75:832:11673
Clo: TE2:May 76:449:12094
TR:141:86

Allen, R. Leonard
See Bing C. Yen, OE75:June 75:504

Allison, Stephen V.
Irrigation Development in Bangladesh, with Kazi F. Jalal, IR1:Mar 74:69:10394
Dsc: Phillip Z. Kirpich, IR4:Dec 74:515:10975; John Fothergill Cooke, IR4:Dec 74:518:10975
Clo: IR3:Sept 75:227:11536
TR:141:88

Alliy, George H.
Dsc, ST7:July 76:1515:12226, of "Thermal Calculations for Bridge Design", ST9:Sept 75:1763: 11545

Allsbrook, David N.
Horton Plaza Redevelopment Project—A Hope for Centre City San Diego, Preprint No.2730, Apr 76, 5pp.

Al-Mahaidi, Risdh S.
Coupled Shear Wall Analysis by Lagrange Multipliers, with Arthur H. Nilson, ST11:Nov 75: 2359:11732
Dsc: Awadh B. Agrawal and Aftab A. Mufti, ST7: July 76:1527:12226; Gelu Onu, ST10:Oct 76: 2089:12441; Kyle L. Peyton, Ronald J. Mazar and Ralph M. Richard, ST10:Oct 76:2092:12441
TR:141:480

Almquist, Charles W.
See E. Eric Adams, OE75:June 75:41

Almroth, Bo O.
The Computer in Shell Stability Analysis, with James H. Starnes, EM6:Dec 75:873:11811
TR:141:505

Almuti, Amin M.
Large Flexible Turbine Foundations, T76:Aug 76:707

Alonso, Carlos V.
Dsc, HY9:Sept 75:1295:11535, of "Jet-Forced Circulations in Water-Supply Reservoirs", HY12: Dec 74:1809:11026
See S. N. Prasad, WW76:Aug 76:760

Alpern, Milton
"ASCE Guide to Employment Conditions for Civil Engineers," by Committee on Employment Conditions (Book Review), CE:Feb 76:38
Motivation of Students Towards Professional Thinking, EI3:July 75:413:11435
TR:141:432
Quantity Instead of Quality: A Sabotage of Engineering and Its Education by "Engineer Shortage" Propaganda?, EI4:Oct 76:457:12501

Alperstein, Robert
Site Investigation with Static Cone Penetrometer, with Samuel A. Leifer, GT5:May 76:539:12154

Alsaigh, Jasim M.
See Howard I. Epstein, TN: ST1:Jan 76:318:11821

Alushin, Michael S.
Federal-State Relations in Water Quality Planning, HY3:Mar 75:523:11160
TR:141:248

Amar, Abnish C.
Ground-Water Recharge Simulation, HY9:Sept 75: 1235:11588
Dsc: Anand Prakash, HY7:July 76:1067:12225
TR:141:453

Amein, Michael
Circulation and Surge Modeling in Pamlico Sound, N.C., with Damodar S. Airan, Preprint No.2665, Apr 76, 29pp.
Computation of Flow through Masonboro Inlet, N.C., WW1:Feb 75:93:11124
Dsc: N. Jothi Shankar, WW1:Feb 76:105:11882
Clo: Nilakanthan Jothi Shankar, WW4:Nov 76: 480:12512
TR:141:272
Implicit Numerical Modeling of Unsteady Flows, with Hsiao-Ling Chu, HY6:June 75:717:11378
Dsc: Jean A. Cunge, HY1:Jan 76:120:11817; Delbert D. Franz, HY1:Jan 76:122:11817
Clo: HY9:Sept 76:1399:12364
TR:141:349
Dsc, HY8:Aug 75:1098:11470, of "Comparison of Four Numerical Methods for Flood Routing", HY7: July 74:879:10659

Amend, J. H.
Oxygen Depletion and Sulfate Production in Strip Mine Spoil Dams, with Dinshaw N. Contractor and Chandrakant S. Desai, NMG:June 76:II-1155

Amerasinghe, Srinath F.
Anisotropy in Heavily Overconsolidated Kaolin, with Richard H.G. Parry, GT12:Dec 75:1277:11808
Dsc: Adel S. Saada, GT7:July 76:823:12224; Robert D. Holtz, GT12:Dec 76:1284:12585
TR:141:524

Ames, Peter L.
Section VII — Licensing, EFEEC:Aug 75:425

Amir, Ilan
Irrigation Timetable Combined with Optimal Operating of an Agricultural Production System, with Y. Friedman, S. Sharon and A. Ben David, IR76:July 76:192

Amir, Joram M.
Finite Element Analysis of Piles in Expansive Media, with M. Sokolov, GT7:July 76:701:12256
Dsc, GT7:July 75:697:11398, of "New Rheological Model for Soil Behavior", GT7:July 74:807:10675

Ammann, Othmar H.
O.H. Ammann: A View from the Bridge, CE:July 76: 77

Amorocho, Jaime
See Alan F. Babb, HY5:May 76:581:12097

Amron, Irving
History of Indexing and Abstracting by the American Society of Civil Engineers, Preprint No.2736, Sept 76, 25pp.
Indexing Shortcut, CE:Jan 76:91

Anadol, Koksal
Dsc, with Ersin Arioglu, ST11:Nov 75:2451:11675, of "Brick Masonry Shells", ST1:Jan 75:79:11050

Anand, Subhash C.
Inelastic Buckling of Rings with Residual Stresses, with Alvin R. Griffith, EM5:Oct 73:927:10063
Dsc: Kuang-han Chu, EM1:Feb 75:81:11086
Clo: EM4:Aug 75:485:11468
TR:141:12

Prestressed Composite Continuous Bridge Girder, with Clarence J. Fennell, III, TN: ST1:Jan 76:313: 11821
Dsc, GT1:Jan 75:79:11037, of "Stresses on Shallow Circular Pipe by Transformed Section", GT6:June 74:637:10631
Dsc, ST1:Jan 75:349:11039, of "Concrete Pipe Culvert Behavior—Part 1", ST3:Mar 74:599:10404
Dsc, ST1:Jan 75:351:11039, of "Concrete Pipe Culvert Behavior - Part 2", ST3:Mar 74:615:10408
See Rick R. Evans, Preprint No.2737, Sept 76, 25pp.

Anand, Yogindra N.
Computer-Aided Design: Toward an Optimal Design of Concrete Structures, with Edward J. Rhomberg and Constancio F. Miranda, ST76:Aug 76:1060

Anderl, William H.
Maintaining Water Quality in Voyageurs National Park, Preprint No.2686, Apr 76, 14pp.

Andersen, Arthur B.
Steel Frame, Precast Floors Meet Impossible Time Constraints, CE:Feb 76:54

Andersen, Knut H.
See Jean-Herve Prevost, WW4:Nov 75:464:11677

Anderson, Alexander
Menabrea's Note on Waterhammer: 1858, HY1:Jan 76:29:11831
Errata: HY11:Nov 76:1703:12508
Dsc, HY7:July 75:1024:11399, of "Simulation Accuracies of Gradually Varied Flow", HY7:July 74:1011:10677

Anderson, Arthur D.
Off-Highway Transportation in the Arctic, CE:Mar 76:72

Anderson, Arthur H., Jr.
Earth Retention by Drilled Reinforced Concrete Caissons, CE:Oct 76:54

Anderson, Arthur R.
Concrete Barge of First Totally Offshore LPG Facility, CE:Apr 76:58
Dsc: Ben C. Gerwick, Jr., CE:July 76:36

Anderson, Donald G.
Effects of Straining on Shear Modulus of Clays, with Frank E. Richart, Jr., GT9:Sept 76:975:12428
Time-Dependent Increase in Shear Modulus of Clay, with Richard D. Woods, GT5:May 76:525:12147
Dsc, with Richard D. Woods, GT11:Nov 74:1254: 10897, of "Vibratory In Situ and Laboratory Soil Moduli Compared", SM12:Dec 73:1055:10219

Anderson, Donald R.
See Robert Willis, EE2:Apr 75:245:11246

Anderson, Grant S.
Runway Rebuilding with Daily Use, with Kenneth T. Giles, CE:Mar 75:78
TR:141:124

Anderson, J. C.
Storm Water Management for the Merivale Industrial Area — Township of Nepean, IR76:July 76:593

Anderson, James C.
Seismic Behavior of K-Braced Framing Systems, ST10:Oct 75:2147:11636
Dsc: Reza Nilforoushan and Robert D. Hanson, ST8:Aug 76:1641:12281
TR:141:448
Seismic Response of Pipelines on Friction Supports, with Anand K. Singh, EM2:Apr 76:275:12043
See Lawrence A. Loziuk, PO2:Nov 73:349:10150

Anderson, Loren R.
Underwater Placement of Sand Fill at Port of Portland Terminal #6, with John Ramage, Preprint No.2718, Apr 76, 20pp.

Anderson, Robert D.
See Henry W. Janes, Preprint No.2777, Sept 76, 28pp.

Anderson, Thor L.
The Superdome Foundation, with Melvin C. Williams, CO1:Mar 76.81:11971

Anderson, W. Carl
Dsc, with Roy J. Mohler, ST10:Oct 75:2184:11601, of "Design of Steel Transmission Pole Structures", ST12:Dec 74:2449:11009

Anderson, William C.
Coal Pile Leachate—Quantity and Quality Characteristics, with Mark P. Youngstrom, EE6: Dec 76:1239:12626

Andres, David
See Gary Parker, WW76:Aug 76:1248

Andreu-Villegas, Rafael
Optimizing Flocculator Power Input, with Raymond D. Letterman, EE2:Apr 76:251:12032

Andrews, Joseph Daniel
Memoir of, TR:141:539

Aneja, Ish K.
Nuclear Turbine-Generator Foundation Model Tests, with Brian W. Dimmick, Preprint No.2704, Apr 76, 30pp.

Ang, Alfredo H-S.
Analysis of Activity Networks under Uncertainty, with Jamal Abdelnour and Amal A. Chaker, EM4: Aug 75:373:11514
TR:141:334

Angarola, Ralph J., Jr.
Dsc, SU2:Nov 74:175:10900, of "Tunnel Survey and Tunneling Machine Control", SU1:Sept 73:21: 10008

Angeloni, William A.
Survey Program for Civil Works Projects, SU1:Oct 75:121:11662
Dsc: John R. Stipp, SU1:Dec 76:101:12589
TR:141:385

Anglin, Richard L., Jr.
Dsc, CE:Sept 75:26, on Environmental Impact Reports: Problems and Opportunities, CE:May 75: 71

Annaki, Mokhtar
Equivalent Uniform Cycle Concept for Soil Dynamics, with Kenneth L. Lee, Preprint No.2752, Sept 76, 28pp.

Annambhotla, V. S. Shastri
See Anand Prakash, HY12:Dec 76:1780:12586

Ansourian, Peter
Composite Connections to External Columns, with Jack William Roderick, ST8:Aug 76:1609:12320

Anthonisen, Arthur C.
See Dale R. Baker, EE5:Oct 75:759:11641

Anutti, A.
Dsc, SDNPF:Dec 73:III-107, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81

Apparao, Tamirisa V.S.R.
Dsc, ST9:Sept 76:1952:12366, of "Design of Diaphragm-Braced I-Beams", ST10:Oct 75:2045: 11615
See Samuel J. Errera, ST4:Apr 76:769:12051
See Samuel J. Errera, ST9:Sept 76:1685:12397

Appel, Erik
See Arthur W. Brune, HY12:Dec 75:1519:11801

Appel, G. C., Jr.
See Chandrakant S. Desai, NMG:June 76:1-405

Appleyard, J. R.
Dsc, EE4:Aug 75:675:11467, of "Least Cost Design of Branched Pipe Network System", EE4:Aug 74: 821:10711

April, Gary C.
Predicting Material Transportation in Mobile Bay, with Samuel Ng, Hua-An Liu and Donald O. Hill, DIEE:Jan 76:833

Apsel, Rany J.
Torsional Response of Rigid Embedded Foundation, with Juan Enrique Luco, EM6:Dec 76:957:12627

Arceivala, Sorab
Dsc, EE5:Oct 76:1130:12436, of "Biomass Distribution and Kinetics of Baffled Lagoons", EE6:Dec 75:1005:11787

Archer, John S.
Finite Element Analysis of Linear Dynamic Behavior, Preprint No.2765, Sept 76, 30pp.

Archer, Robert R.
See Rajabhau S. Deshmukh, EM5:Oct 74:903:10860

Argaman, Yerachmiel
Use of Jet Pumps in Marine Waste Disposal, with Michael Vajda and Noah Galil, EE5:Oct 75:703: 11639
TR:141:434

Ariathurai, Ranjan
Finite Element Model for Cohesive Sediment Transport, with Ray B. Krone, HY3:Mar 76:323: 11987

Arioglu, Ersin
See Koksal Anadol, ST11:Nov 75:2451:11675

Arman, Ara
Treatment of Soft Foundations — A Review of Current Practice, Preprint No.2797, Sept 76, 36pp.
See Robert L. Thoms, NMG:June 76:11-623

Armentrout, Daryl R.
See Ted L. Winstead, ST10:Oct 75:2103:11635

Armstrong, John M.
Dynamic Programming Model for Wastewater Plant Investment, EE5:Oct 76:985:12466

Arnts, Gerald W., Jr.
Structural Design of Large Space Telescope, TE2: May 76:363:12132

Arockiasamy, M.
See M. Lakshmipathy, ST12:Dec 76:2385:12588

Arora, Jasbir S.
Optimal Design of Plane Frames, with Edward J. Haug, Jr. and Kwan Rim, ST10:Oct 75:2063:11633
Errata: ST9:Sept 76:1954:12366
TR:141:439
Survey of Structural Reanalysis Techniques, ST4:Apr 76:783:12056

Arora, Madan G.
Numerical Analysis of Rigid Pavement Resting over Hookean Subgrade Continuum, with Sudarshan K. Khanna, NMG:June 76:1-511

Arora, Madan L.
Flows Split in Closed Loops Expending Least Energy, TN: HY3:Mar 76:455:11954

Arthur, Harold G.
Concrete in Water Resource and Energy Development, Preprint No.2741, Sept 76, 30pp.
A History of Bureau of Reclamation Construction-Part I, CO1:Mar 75:51:11189
TR:141:214
A History of Bureau of Reclamation Construction-Part II, CO1:Mar 75:69:11190
TR:141:220
Pueblo Dam - A Bureau of Reclamation First, CE: July 75:70
TR:141:301

Arulanandan, Kandiah
Pore and Eroding Fluid Influences on Surface Erosion on Soil, with Paripurnanandan Loganathan and Ray B. Krone, GT1:Jan 75:51:11078
Dsc: James L. Sherard, EM12:Dec 75:1299: 11743; T. S. Ramanathanlyer and S. J. Nigli, GT:Jan 76:113:11816
Clo: GT8:Aug 76:883:12279
TR:141:194
See James A. Cheney, GT12:Dec 75:1301:11743

Asano, Takashi
See Joe M. Shane, EE2:Apr 75:215:11231

Asfura, Alejandro
See Emilio Rosenblueth, ST2:Feb 76:323:11889
See Emilio Rosenblueth, ST5:May 76:1077:12119

Ash, Robert L.
Resonance Phenomena Due to Turbulent Boundary Layer Excitation of Elastic Surfaces, with R. Balasubramanian, Preprint No.2726, Apr 76, 28pp.

Ashmalla, Adel F.
See Paul E. Wisner, IR76:July 76:246

Ashtakala, Balakrishnamurthy
Energy-Intensive Analysis of Truck Transportation, TE2:May 75:225:11289
TR:141:158

Ashton, George D.
See John F. Kennedy, HY1:Jan 74:1:10281
See Darryl J. Calkins, WW76:Aug 76:1726

Ashton, Peter M.
A Legal-Historical Analysis of Navigation User Charges, with Catherine Cooper-Ruska and Leonard A. Shabman, WR1:Apr 76:89:12084

Ashton, William D.
H-Bearing Piles in Limestone and Clay Shales, with Paul H. Schwartz, GT7:July 74:787:10667
Dsc: Hsai-Yang Fang and Thomas D. Dismuke, GT6:June 75:594:11339
Clo: GT1:Jan 76:109:11816
TR:141:91

Aslam, Mohammad
Model Studies of Multicell Curved Box-Girder Bridges, with William G. Godden, EM3:June 75: 207:11366
Dsc: Sanivarapu V. Narasimham, EM3:June 76: 579:12162
Clo: EM6:Dec 76:1093:12584
TR:141:237

Asmis, G. J.K.
Wheel Load Stress Concentrations on Crane Runway Girders, ST76:Aug 76:1005
Dsc, CE:Oct 75:30, on Protecting Your Firm against Liability Claims, CE:June 75:66

Assaf, Karen
See Irina Cech, IR1:Mar 76:119:11957

Asthana, Krishna C.
Transformation of Moody Diagram, HY6:June 74: 797:10624

Dsc: Joseph R. Reed, HY1:Jan 75:204:11038; Beni P. Sangal, HY1:Jan 75:205:11038; James J. Sharp, HY1:Jan 75:205:11038; John F. Muir, HY1:Jan 75:206:11038; Peter Ackers, HY4:Apr 75:420:11209; David I.H. Barr, HY4:Apr 75:422:11209; David A. Beatty, HY4:Apr 75:425:11209; Jacques Bruschin, HY4:Apr 75:425:11209; Kittur G. RangaRaju, HY4:Apr 75:428:11209; Trevor R. Fietz, HY3:Mar 75:561:11148; Jatinder K. Bewtra, HY3:Mar 75:563:11148
Errata: HY10:Oct 75:1361:11600
Errata: HY6:June 75:780:11340
Clo: HY12:Dec 75:1541:11744
TR:141:83

Ateshian, John K.H.
Estimation of Rainfall Erosion Index, IR3:Sept 74:293:10817
Dsc: Kenneth G. Renard, IR3:Sept 75:240:11536; Kenneth G. Renard and J. Roger Simanton, IR3:Sept 75:242:11536; Donald E. Woodward, IR3:Sept 75:245:11536
TR:141:201

Atesmen, Kemal M.
Point Source Dispersion in Turbulent Open Channels, HY7:July 75:789:11413
TR:141:357

Atkinson, Bernard
Slime Holdup, Influent BOD, and Mass Transfer in Trickling Filters, with John A. Howell, EE4:Aug 75:585:11505
TR:141:376

Atkinson, Paul
Address at Ocean Engineering III, OE75:June 75:1476

Atkinson, Richard Henry
Statistical Variation of the Compliance of Coal, with Hon-Yim Ko, NMG:June 76:I-367

Atmatzidis, Dimitrios K.
See Raymond J. Krizek, DIEE:Jan 76:609

Au, Tung
Issues and Problems in Urban Planning, EI3:July 75:305:11417
Dsc: Jawalker K. Sridhar Rao, EI3:July 76:395:12223
TR:141:365
See David Ghahraman, TE4:Nov 75:807:11735

Audibert, Jean M.E.
Response of Footings on Micaceous, Cohesionless Soils, with Nabil F. Ismael and G. Wayne Clough, NMG:June 76:I-567
See John T. Christian, NMG:June 76:II-979

Austin, Donald S.
Donald S. Austin Takes Office in Philadelphia, CE:Oct 76:93

Austin, T. Al
Optimum Pipe Sizing in a Branching Irrigation System, Preprint No.2679, Apr 76, 14pp.
Dsc, IR2:June 75:115:11341, of "Economic Pipe Sizing for Gravity Sprinkler Systems", IR2:June 74:107:10583
See Robert S. Schulz, HY1:Jan 76:15:11843
See Robert B. Robinson, HY8:Aug 76:1119:12301

Austin, Walter J.
Elastic Buckling of Arches under Symmetrical Loading, with Timothy J. Ross, ST5:May 76:1085:12149

Avent, R. Richard
Analysis of Beam-Columns on Elastic Supports, with Dieter Bounin and Hee Chong Rhee, TN: ST3:Mar 76:691:11956
Deflection and Ponding of Steel Joists, ST7:July 76:1399:12241
Discrete Field Stability Analysis of Ribbed Plates, with Dieter Bounin, ST9:Sept 76:1917:12413
Elastic Stability of Polygon Folded Plate Columns, with James H. Robinson, Jr., ST5:May 76:1015:12108
Epoxy-Repaired Bolted Timber Connections, with Leroy Z. Emkin, Robert H. Howard and Charles L. Chapman, ST4:Apr 76:821:12061
Rainwater Ponding on Beam-Girder Roof Systems, with William G. Stewart, ST9:Sept 75:1913:11564
Dsc: Bin Chang and Ken P. Chong, ST7:July 76:1517:12226
TR:141:417

Avery, Craig M.
See Yang H. Huang, GT1:Jan 76:41:11838

Ayers, Ray R.
Bending Strength of Rectangular Hallow Sections, with James M. Nash and William J. Graff, ST76:Aug 76:439

Ayoob, S. M.
Flood Control in the Province of the Punjab (Pakistan), with Wali Muhammad Choudhry, WW76:Aug 76:1071

Aysto, Pentti
See Sriramulu Vinnakota, ST11:Nov 74:2235:10919

Azar, Jamal J.
Pipeline Stress Analysis, with John G. Bomba and Verle G. Randolph, TE1:Feb 75:163:11122
Dsc: Peter C. Kohnke, TE4:Nov 75:836:11673
TR:141:139

Aziz, Khandker A.
Rheological Model of Laterally Stressed Frozen Soil, with Jan T. Laba, GT8:Aug 76:825:12316

Aziz, Tarek S.
Dsc, ST11:Nov 75:2444:11675, of "Earthquake Design of Buildings:Damping", ST1:Jan 75:11:11041

Azzeh, Jamil A.
See John C. Glennon, TE1:Feb 76:75:11912

Azzouz, Amr S.
See Mohsen M. Baligh, GT11:Nov 75:1105:11705
See Mohsen M. Baligh, GT12:Dec 76:1286:12585

Babb, Alan F.
Mean Energy in Gradually Diverging Flow, with Jaime Amorocho, HY5:May 76:581:12097

Babu Rao, T. G.
Dsc, with Ganganna Ranganna, Irvathur Vasudeva Nayak, M. Parameswarappa and V. Hiremath, HY10:Oct 75:1361:11600, of "Surface Runoff Hydrograph Equation", HY10:Oct 74:1353:10880

Bacher, Alfred E.
See Raymond Eugene Davis, ST3:Mar 74:599:10404
See Raymond Eugene Davis, ST3:Mar 74:615:10408

Bachner, John P.
See Eugene B. Waggoner, CE:Apr 76:63

Baerwald, John E.
Bicycle Facility Design Considerations: A Summary, BP75:Dec 75:259
Education of Bicycle Riders - How Much is Enough?, BP75:Dec 75:545

Bafus, Guy R.
Thermal Analysis of Frozen Embankment Islands, with Gary L. Guymon, WW2:May 76:123:12139

Baguelin, Francois
Further Insights on the Self-Boring Technique Developed in France, with Jean-Francois Jezequel, GT75:June 75:II-231

Dsc, with Jean-Francois Jezequel, GT75:June 75:II-231, of "In Situ Measurement of Initial Stress and Deformation Characteristics", GT75:June 75:II-181

Bahel-El-Din, Yehia
FAR — A Self-Teaching Frame Analysis Routine, with Senol Utku, Preprint No.2737, Sept 76, 44pp.

Bahr, Thomas G.
See Darrell L. King, IR76:July 76:128

Bailey, Reginald E.
Project Formulation in Today's World — The New Dimensions of Legislative and Regulatory Aspects, IR76:July 76:632

Bailey, Thomas E.
See George R. Grantham, WR1:Apr 76:11:12060

Baird, W. F.
Accelerometer Wave Recording Buoy, with C. W. Glodowski, OE75:June 75:1104

Baker, Dale R.
Oxygen Transfer at High Solids Concentrations, with Raymond C. Loehr and Arthur C. Anthonisen, EE5:Oct 75:759:11641
TR:141:447

Baker, John M.
Dsc, with Quintin B. Graves, EE5:Oct 74:1190:10836, of "Design Optimization for Biological Filter Models", EE6:Dec 73:831:10191

Baker, Robert F.
Dsc, CE:Feb 76:28, on OTA: Mixing Technology and National Goals, CE:Dec 75:78

Baladi, George Y.
See Ivan S. Sandler, GT7:July 76:683:12243

Balasubramaniam, A. S.
Stress-Strain Behavior of Soft Bangkok Clay, with A. R. Chaudhry, NMG:June 76:I-390

Balasubramanian, R.
See Robert L. Ash, Preprint No.2726, Apr 76, 28pp.

Balek, Jaroslav
Dsc, IR3:Sept 75:248:11536, of "Effect of Snow Cover on Upward Movement of Soil Moisture", IR4:Dec 74:405:10989

Baligh, Mohsen M.
Cavity Expansion in Sands with Curved Envelopes, GT11:Nov 76:1131:12536
End Effects on Stability of Cohesive Slopes, with Amr S. Azzouz, GT11:Nov 75:1105:11705
Dsc: H. John Hovland, GT7:July 76:820:12224
TR:141:504
Quasi-Static Deep Penetration in Clays, with Ronald F. Scott, GT11:Nov 75:1119:11706
Dsc: Branko Ladanyi, GT7:July 76:821:12224
TR:141:510
Dsc, with Amr S. Azzouz, GT12:Dec 76:1286:12585, of "Stability of Vertical Corner Cut with Concentrated Surcharge Load", GT1:Jan 76:31:11842

Ball, James W.
Cavitation from Surface Irregularities in High Velocity, HY9:Sept 76:1283:12435
Predicting Cavitation in Sudden Enlargements, with J. Paul Tullis and Travis Stripling, HY7:July 75:857:11442
TR:141:368

Ballard, Robert F., Jr.
Method for Crosshole Seismic Testing, GT12:Dec 76:1261:12646

Ballofet, Armando
Mathematical Model of the Bicol River System (Luzon, Philippines), with Virgilio A. Sahagun, WW76:Aug 76:170

Ballou, Michael J.
Dsc, Employment Dilemma, CE:Sept 76:28

Bally, Rene-Jacques
Dsc, GT9:Sept 75:981:11534, of "Differential Settlement of Buildings", GT9:Sept 74:973:10802

Bancsi, John J.
See Andrew Benedek, EE1:Feb 76:17:11887

Banerjee, Ajoy
Circular Mats under Arbitrary Loading, with Ziva D. Jankov, ST10:Oct 75:2133:11637
TR:141:449

Banerjee, Himangsu K.
See Amitabha Ghosal, CO4:Dec 74:631:11034

Banerjee, Prasanta K.
Three-Dimensional Analysis of Vertical Pile Groups, with Richard M. Driscoll, NMG:June 76:I-438

Banerji, Shankha K.
Dsc, with C. Michael Robson, EE6:Dec 74:1283:10971, of "Sewage Chlorination Versus Toxicity — A Dilemma?", EE6:Dec 73:761:10190

Banister, John R.
In-Situ Pore Presure Measurements at Rio Blanco, with Robert Pyke, D. Maxwell Ellett and Leon Winters, GT10:Oct 76:1073:12471

Banks, Harvey O.
Dsc, HY9:Sept 76:1400:12364, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445
1976 Julian Hinds Award Presented to Harvey O. Banks, CE:Oct 76:103

Banks, Robert B.
Distributions of BOD and DO in Rivers and Lakes, EE2:Apr 76:265:12028
Some Features of Wind Action on Shallow Lakes, EE5:Oct 75:813:11640
Dsc: Chih-Lan Su, EE4:Aug 76:867:12277
TR:141:441

Banov, Abel
Proven Organic Coatings for Long Term Protection, CE:Dec 75:54
TR:141:482
Proven Organic Coatings for Long Term Protection — Part II, CE:Feb 76:64

Bara, John P.
Collapsible Soils, Preprint No.2797, Sept 76, 12pp.

Baram, Michael S.
Environmental Decision-Making and Facilities Siting, EI2:Apr 76:211:12080

Barclay, Paul D.
Specifications for Internal Programming Logic, ST76:Aug 76:869

Bares, Richard
Load Tests of Building Structures, with Neal FitzSimons, ST5:May 75:1111:11322
Dsc: Miklos Ivanyi, ST6:June 76:1260:12166
TR:141:295

Barnard, William D.
Predicting and Controlling Turbidity Around Dredging and Disposal Operations, DIEE:Jan 76:930

Barnes, A. H.
See Fred D. Theurer, WW76:Aug 76:793
See Fred D. Theurer, WW76:Aug 76:1497

Barnes, William L.
See Harold E. Nelson, Preprint No.2815, Sept 76, 27pp.

Barnett, Robert O.
See Chang-ning Sun, TN: ST5:May 76:1141:12128

Baron, Melvin L.
See Ivan S. Sandler, NMG:June 76:I-219

Barr, David I.H.
Explicit Working for Turbulent Pipe Flow Problems, TN: HY5:May 76:667:12129
Dsc, HY4:Apr 75:422:11209, of "Transformation of Moody Diagram", HY6:June 74:797:10624

Barr, David J.
Civil Engineering Applications of Remote Sensing, with Wesley P. James, TE2:May 75:279:11300
TR:141:189

Barrie, Donald S.
Professional Construction Management, with Boyd C. Paulson, Jr., CO3:Sept 76:425:12394

Barrows, Daniel J.
Dsc, CE:Aug 75:38, on Are Contractors Treated Fairly?, CE:May 75:56

Barry, William F.
See John L. Carter, EE2:Apr 75:229:11239

Barsom, John M.
See Charles G. Schilling, ST1:Jan 75:31:11049

Bartal, Kenneth A.
Comprehensive Water Quality Management Planning, with Leonardo V. Gutierrez, Jr., HY4:Apr 75:371:11263
TR:141:303

Barth, Dennis G.
See John E. Hanway, Jr., CE:Oct 76:78

Barthelemy, Bernard
Heating Calculation of Structural Steel Members, ST8:Aug 76:1549:12303

Bartley, Thomas R.
Environmental Aspects of Aquatic Plant Control, with Edward O. Gangstad, IR3:Sept 74:231:10810
Dsc: Kathleen H. Bowmer, IR3:Sept 75:230:11536; Emmett M. O'Loughlin, IR3:Sept 75:232:11536
TR:141:171

Barton, Furman W.
See Donald W. Vannoy, ST76:Aug 76:720

Bartoskewitz, Richard E.
See Harry M. Coyle, GT5:May 76:441:12113

Bartu, Allen S.
Dsc, PO2:Dec 74:213:10976, of "Seismic Design Spectra for Nuclear Power Plants", PO2:Nov 73:287:10142

Basak, P.
Steady Non-Darcian Seepage Through Embankments, IR4:Dec 76:435:12623

Basco, David R.
Analytical Model of Hydraulic Pipeline Dredge, WW1:Feb 75:33:11097
Dsc: Millard P. Robinson, Jr. and Oner Yucel, WW1:Feb 76:97:11882
TR:141:208
Feedback from Field Studies of Hydraulic Dredges, WW3:Aug 75:277:11526
TR:141:406

Bascom, Willard
New Instruments for Studying Ocean Pollution, Preprint No.2721, Apr 76, 13pp.

Basu, Udayaditya
See Annapareddy S. Reddy, IR3:Sept 76:349:12386

Batchelor, Barrington deV.
Model Study of New Standard Prestressed Concrete Bridge, with T. Ivan Campbell, Douglas W. McEwen and Paul Csagoly, ST9:Sept 76:1789:12417
Shear Strength of Two-Way Bridge Slabs, with Ian R. Tissington, ST12:Dec 76:2315:12604
See Brian E. Hewitt, ST9:Sept 75:1837:11548
See Larp Chitnuyanondh, T76:Aug 76:476

Bates, Robert C.
See Sidiq M. Dar, GT7:July 76:739:12242

Bates, William F.
Technical Information Processing Systems, EI2:Apr 75:189:11254
TR:141:297

Bathe, Klaus-Jurgen
On the Accuracy of the Solution of Finite Element Equilibrium Equations, NMG:June 76:I-82
See Vera F. Dunder, STN75:Dec 75:II-379

Batty, J. Clair
Energy Inputs to Irrigation, with Safa N. Hamad and Jack Keller, IR4:Dec 75:293:11810
TR:141:526

Baumann, Dwight M.B.
See David Ghahraman, TE4:Nov 75:807:11735

Baumann, E. Robert
See Robert F. Roskopf, EE5:Oct 76:1005:12460

Baumgartner, Donald J.
Ocean Disposal of Waste Workshop, with Robert B. Biggs, OE75:June 75:1357

Baumli, George R.
Public Involvement and Participation — Open Planning, the Way of the Future, IR76:July 76:707

Baxter, Gene K.
Response of a Column in Random Vibration Tests, with Ross M. Evan-Iwanowski, ST9:Sept 75:1749:11568
TR:141:420

Bayazit, Mehmetcik
Dsc, HY6:June 76:805:12164, of "Solid Particle Settlement in Open-Channel Flow", HY7:July 75:917:11460

Bayliss, John R.
See Anton W. Wegmuller, ST1:Jan 76:231:11863

Bays, Gail
Gail Bays to Assist Executive Director at ASCE Hq, CE:Dec 76:82

Bazant, Zdenek P.
Creep and Shrinkage in Reactor Containment Shells, with Domingo J. Carreira and Adolf Walser, ST10:Oct 75:2117:11632
TR:141:438
Endochronic Constitutive Law for Liquefaction of Sand, with Raymond J. Krizek, EM2:Apr 76:225:12036
Endochronic Theory of Inelasticity and Failure of Concrete, with Parameshwara D. Bhat, EM4:Aug 76:701:12360
Finite Element Analysis of Wave Diffraction by a Crack, with John L. Glazik, Jr. and Jan D. Achenbach, EM3:June 76:479:12220
Dsc: Tsin-Hwei Lu, EM6:Dec 76:1105:12584
Instability, Ductility, and Size Effect in Strain-Softening Concrete, EM2:Apr 76:331:12042
Large-Deflection Spatial Buckling of Thin Walled Beams and Frames, with Mahjoub El Nimeiri, EM6:Dec 73:1259:10247
Dsc: Ernest F. Masur, EM1:Feb 75:82:11086

Errata: EM1:Feb 75:86:11086
Clo: EM4:Aug 75:490:11468
TR:141:39
Micromechanics Model for Creep of Anisotropic Clay, with I. Kutay Ozaydin and Raymond J. Krizek, EM1:Feb 75:57:11138
TR:141:192
Saturated Sand as Inelastic Two-Phase Medium, with Raymond J. Krizek, EM4:Aug 75:317:11508
Errata: EM3:June 76:589:12162
TR:141:325
Dsc, ST9:Sept 74:1976:10772, of "Incremental Finite Element Matrices", ST12:Dec 73:2423:10226
Dsc, with Martin Christensen, ST6:June 76:1285:12166, of "Simplified Analysis of Framed-Tube Structures", ST11:Nov 75:2223:11696
See S. Nemat-Nasser, NMG:June 76:I-79
1976 Walter L. Huber Civil Engineering Research Prizes Presented to Zdenek P. Bazant, Danny L. Fread, Lester A. Hoel, Paul H. King, and John Lysmer, with Danny L. Fread, Lester A. Hoel, Paul H. King and John Lysmer, CE:Oct 76:99

Bear, Tom
Design of the D/FW Airport Terminals for the Public, EFAN:Dec 74:197

Beard, Leo R.
Dsc, HY11:Nov 75:1455:11672, of "Monetary Values of Life and Health", HY1:Jan 75:29:11047

Beard, Richard M.
Holding Capacity of Direct Embedment Anchors, with Homa J. Lee, OE75:June 75:470

Beasley, D. Huw
See Sam Frydman, GT5:May 76:395:12099

Beason, W. Lynn
See Joseph E. Minor, ST1:Jan 76:147:11834

Beathard, R. Michael
See Stanley A. Schumm, WW76:Aug 76:707

Beatty, David A.
Dsc, HY4:Apr 75:425:11209, of "Transformation of Moody Diagram", HY6:June 74:797:10624

Beaulieu, Denis
See Brian R. Wood, ST2:Feb 76:411:11936
See Brian R. Wood, ST3:Mar 76:487:11973

Bechly, Dan S.
Dsc, ST12:Dec 76:2392:12588, of "Stress Cycles for Fatigue Design of Railroad Bridges", ST1:Jan 76:203:11857

Bechtel, Stephen D.
Stephen D. Bechtel Elected to Honorary Membership, CE:Oct 76:94

Bechthold, James L.
See Laurence M. Grotbeck, PO1:July 75:69:11409

Beck, Bruce
Systematic Identification of DO-BOD Model Structure, with Peter Young, EE5:Oct 76:909:12461

Becker, James M.
A Structural Design Process, ST76:Aug 76:341

Becker, Leonard
Operations Models for Central Valley Project, with William W-G. Yeh, Dan M. Fults and Donald Sparks, WR1:Apr 76:101:12062

Bedford, Keith W.
Convective Transport Finite Element Analog, with James A. Liggett, EM6:Dec 75:803:11807
TR:141:492

Bedient, Philip B.
Water Quality Aspects of Agricultural and Urban Drainage, with William G. Characklis, IR76:July 76:374

Beebe, Richard S.
Parking — First Stage in Downtown Redevelopment, Preprint No.2780, Sept 76, 10pp.

Beedle, Lynn S.
Urban Life and Tall Buildings, TN: UP1:Aug 76:237:12336

Beglinger, Robert E.
See Jahanbakhsh Behnam, TE2:May 76:255:12142

Beguin, Gilbert H.
Dsc, ST3:Mar 75:616:11151, of "Composite Steel-Concrete Construction", ST5:May 74:1085:10561

Behnam, Jahanbakhsh
Effect of Energy Shortage and Land Use on Auto Occupancy, with Robert E. Beglinger, TE2:May 76:255:12142

Beichley, Glenn L.
Cavitation Control by Aeration of High-Velocity Jets, with Danny L. King, HY7:July 75:829:11462
TR:141:400

Beim, Joseph
Dsc, Transit Observation, CE:June 76:34

Belardi, James G.
See Dennis W. Weeter, TN: EE1:Feb 76:233:11883

Belina, Constance Matthews
Bravo, Connie, CE:Sept 76:109

Bell, D. Craig
The "Kiechel Bill:" A Misguided Attempt to Resolve Federal-State Water Rights Conflicts, Preprint No.2652, Apr 76, 15pp.

Bell, J. Richard
Future Advances in Soil Placement and Improvement, Preprint No.2775, Sept 76, 19pp.

Bell, Thomas F.
OCIMF Marine Terminal Activities, Preprint No.2654, Apr 76, 25pp.

Bella, David A.
Strategic Approach to Estuarine Environmental Management, WW1:Feb 75:73:11109
TR:141:260
Dsc, EE6:Dec 74:1293:10971, of "Oxygen Depletion Model for Cayuga Lake", EE1:Feb 74:41:10346

Below, Kevin D.
Theory for Concrete Beams in Torsion and Bending, with B. Vijaya Rangan and A. Stanley Hall, ST8:Aug 75:1645:11480
TR:141:375

Belt, Robert M.
Dsc, EI4:Oct 76:484:12437, of "When Is A Political Contribution Influence Buying?", EI1:Jan 76:1:11860

Beltaos, Spyridon
The Bed-Load Function, TN: HY1:Jan 76:131:11820
Impinging Circular Turbulent Jets, with Nallamuthu Rajaratnam, HY10:Oct 74:1313:10852
Errata: HY8:Aug 75:1109:11470
TR:141:136
Oblique Impingement of Plane Turbulent Jets, HY9:Sept 76:1177:12388
See Nallamuthu Rajaratnam, HY5:May 76:599:12152

Belytschko, Ted B.
See Lawrence A. Loziuk, PO2:Nov 73:349:10150

Bemis, Charles
See Louis J. Lee, Preprint No.2708, Apr 76, 14pp.

Bender, Brice F.
Prestressed Concrete Bridges, Preprint No.2742, Sept 76, 20pp.

Bendixen, Stein
See Lars-Eric Janson, EE6:Dec 76:1139:12596

Benedek, Andrew
Laboratory Evaluation of Polymeric Flocculants, with John J. Bancsi, EE1:Feb 76:17:11887

Benedict, Arthur H.
Dsc, EE6:Dec 75:1039:11741, of "Effects of Shock Temperature on Biological Systems", EE2:Apr 75:229:11239

Benjamin, Neal B.H.
Comparision of Construction Labor Agreements, with Arthur W. Young, CO1:Mar 75:183:11180
TR:141:173

Benjes, Henry H., Jr.
Dsc, EE2:Apr 76:500:12010, of "Temperature Effects on Aerobic Digestion Kinetics", EE5:Oct 75:795:11646

Bennefield, Larry D.
Dsc, with Clifford W. Randall, EE1:Feb 75:189:11084, of "Philadelphia Pilots--Builds Oxygen Activated Sludge", EE4:Aug 74:919:10722
Dsc, with Clifford W. Randall, EE4:Aug 76:874:12277, of "Design Graphs for Activated Sludge Process", EE5:Oct 75:829:11659

Bennett, F. Lawrence
A Half-Century of Cold-Regions Construction, CO4:Dec 75:839:11780
TR:141:527

Benson, Cade L.
Highway in Harmony with Its Environment, CE:Sept 76:56

Benzley, Steven E.
Dynamic Response of Membranes with Finite Elements, with Samuel W. Key, EM3:June 76:447:12217

Ben-Zvi, Arie
Dsc, HY4:Apr 75:436:11209, of "Urban Runoff by Linearized Subhydrographic Method", HY8:Aug 74:1141:10766
Dsc, HY6:June 75:783:11340, of "Comparison of Four Numerical Methods for Flood Routing", HY7:July 74:879:10659

Berg, David R.
Solid Waste Management at Energy Complexes, EFEEC:Aug 75:201

Berg, Glen V.
Historical Review of Earthquakes, Damage, and Building Codes, ST76:Aug 76:387

Berger, Bernard B.
See Leonard B. Dworsky, Preprint No.2754, Sept 76, 16pp.

Berger, Jean M.
Zinc Paint Can Save $500,000 On Your Powerplant, CE:Oct 76:66

Bergevin, Gilles
The Le Grande Hydroelectric Development, with Richard N. Seemel, CE:Sept 76:60

Bergmann, Dietrich R.
Automated Ground Transportation System Stations with Multiple Loading Positions, TE2:May 75:383:11328
TR:141:237

Berkowitz, Carl M.
See Walter H. Kraft, BP75:Dec 75:36
See Sam Kahan, TE3:Aug 76:507:12298

Berlin, Geoffrey N.
Method for Delineating Districts of Varying Shape, TE4:Nov 76:805:12537

Bernard, Robert S.
See Dwain K. Butler, GT1:Jan 75:71:11037

Bernheimer, Max
See Robert C. Johnston, Preprint No.2710, Apr 76, 28pp.
See Robert C. Johnston, GT12:Dec 76:1209:12624

Bernstein, Leon
See Jan van Schilfgaarde, IR3:Sept 74:321:10822

Berry, Peter L.
Consolidation of Fibrous Peat, with Brian Vickers, GT8:Aug 75:741:11493
TR:141:384

Berryhill, James J.
The Role of the Bicycle, BP75:Dec 75:33
See Thomas H. Crawford, BP75:Dec 75:278

Berryman, A. D.
Missouri River Stage-Discharge Shift, with Howard E. Christian and Everett V. Richardson, WW76:Aug 76:1350

Bertelsen, Jens Aa.
See Ove Skovgaard, WW1:Feb 75:15:11100

Bertero, Vitelmo V.
See Helmut Krawinkler, ST11:Nov 75:2317:11717
See Stephen A. Mahin, ST9:Sept 76:1759:12407

Berthouex, Paul M.
Modeling Sewage Treatment Plant Input BOD Data, with William G. Hunter, Lars C. Pallesen and Chun-Yen Shih, EE1:Feb 75:127:11132
Dsc: Barry J. Adams, EE5:Oct 75:877:11596; Ashok N. Shahane, EE6:Dec 75:1036:11741
TR:141:262

Bervig, Dale R.
Effect of Uplift on Soil-Structure Interaction and Toe Pressure Calculation, with Chang Chen, STN75:Dec 75:II-351

Bessler, Michael B.
Salinity Control and Federal Water Quality Act, with John T. Maletic, HY5:May 75:581:11321
Dsc: Arthur F. Pillsbury, HY12:Dec 75:1551:11744
Clo: HY6:June 76:788:12164
TR:141:315

Bessom, Richard M.
Marketing's Role in Construction Firms, CO3:Sept 75:647:11592
TR:141:435

Betz, John V.
Proposed Standards: Land Disposal of Effluents, CE:May 75:77
TR:141:226

Bevier, Barry
See Donald H. Gray, GT1:Jan 76:117:11816

Bevilacqua, Oreste M.
See John B. Peers, TE4:Nov 76:821:12544

Bewtra, Jatinder K.
Dsc, HY3:Mar 75:563:11148, of "Transformation of Moody Diagram", HY6:June 74:797:10624

Bezzone, Albert P., Jr.
1976 A.P. Greensfelder Prize Presented to A.P. Bezzone, CE:Oct 76:100

Bhagavantam, Dasika
Dsc, HY12:Dec 74:1842:10974, of "Studies on Seepage from Canals with Partial Lining", HY12: Dec 73:2333:10197

Bhandari, Narindar
Optimum Use of Pretensioning, Post-Tensioning, and Two-Way Prestressing, TN: CO2:June 76:403: 12167

Bhargava, V. P.
See S. Narasimhan, HY3:Mar 75:550:11148
See S. Narasimhan, HY3:Mar 76:339:12004

Bhaskaran, Ravikumar
Anisotropy for Finite Element Analysis, NMG:June 76:1-345
Dsc, GT11:Nov 76:1204:12507, of "Strength of One Dimensionally Consolidated Clays", GT11:Nov 75: 1151:11707

Bhat, Parameshwara D.
See Zdenek P. Bazant, EM4:Aug 76:701:12360

Bhattacharya, Ashim K.
A Subsurface Drainage Cost and Hydrologic Model, with Nader Foroud, Sie-tan Chieng and Robert S. Broughton, Preprint No.2773, Sept 76, 18pp.

Bhowmik, Nani G.
Stilling Basin Design for Low Froude Number, HY7: July 75:901:11448
Dsc: Fred W. Blaisdell, HY6:June 76:796:12164; H. D. Sharma and Dharam V. Varshney, HY6: June 76:797:12164
Clo: HY12:Dec 76:1767:12586
TR:141:374
Dsc, HY4:Apr 76:542:12014, of "Boundary Shear in Channel with Flood Plain", HY7:July 75:933:11452

Bhushan, Kul
Stress Distribution for Heavy Embedded Structures, with Steven C. Haley, TN: GT7:July 76:807:12227

Bianchini, Gary F.
See Adel S. Saada, GT11:Nov 75:1151:11707

Bickley, John A.
Concrete Technology Aspects of CN Tower, CO1: Mar 75:201:11192
TR:141:227

Biediger, George
See Bruce Yandle, UP2:Nov 75:147:11689

Bieganousky, Wayne A.
Uniform Placement of Sand, with William F. Marcuson, III, GT3:Mar 76:229:11985
See William F. Marcuson, III, Preprint No.2752, Sept 76, 30pp.

Bielak, Jacobo
Modal Analysis for Building-Soil Interaction, EM5: Oct 76:771:12451

Biewer, Frank N.
The Semi-Submersible Storage and Production Unit, Preprint No.2639, Apr 76, 25pp.

Bigelow, Lawrence N.
Fifty-Year Development — Construction of Steel Truss Bridges, CO2:June 75:239:11381
TR:141:296

Biggs, John M.
See Robert V. Whitman, ST5:May 75:1067:11309

Biggs, Robert B.
See Donald J. Baumgartner, OE75:June 75:1357

Billings, Leon G.
Evolution of 208 Water-Quality Planning, CE:Nov 76.54

Billington, David P.
Art in Engineering - The Need for a New Criticism, PP4:Oct 73:499:10102
Dsc: Luis P. Saenz, EI3:July 74:261:10633; Robert N. Scanlan, EI3:July 74:264:10633
Clo: EI3:July 76:393:12223
TR:140:561
Design of Cooling Towers for Wind, with John F. Abel, ST76:Aug 76:242
The Turn From Masonry: A Study of Arch Bridges in Reinforced Concrete, Preprint No.2819, Sept 76, 30pp.
See Yung-shih Wang, EM4:Aug 74:719:10720
See Yung-shih Wang, EM5:Oct 74:1005:10874
See John F. Abel, PO2:Dec 74:209:10976
See Richard D Larrabee, ST12:Dec 74:2367:11002
See Peter P. Cole, ST6:June 75:1185:11364
See Peter P. Cole, ST6:June 75:1205:11365

Binger, Wilson V.
Dsc, Eads Bridge, CE:Oct 76:22

Binkerd, Roger C.
See Mark Markofsky, HY3:Mar 75:361:11171

Binnie, Alfred M.
Suppression of Waves in Slotted-Walled Channel, HY3:Mar 76:397:12006

Binquet, Jean
Bearing Capacity Analysis of Reinforced Earth Slabs, with Kenneth L. Lee, GT12:Dec 75:1257:11793
TR:141:521
Bearing Capacity Tests on Reinforced Earth Slabs, with Kenneth L. Lee, GT12:Dec 75:1241:11792
TR:141:520

Biondi, Paolo
Limit Load of a Foundation in a Strain-Softening Soil, with Giovanni Manfredini, Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:1-591

Bird, John W.
Your Water — How Secure?, IR3:Sept 76:363:12424

Birdsall, Blair
Dsc, CO3:Sept 76:572:12362, of "Fifty-Year Development — Construction of Steel Pipeline Suspension Bridges", CO4:Dec 75:733:11768

Birkemoe, Peter C.
See R. Shankaran Nair, ST2:Feb 74:351:10373

Birnbaum, Marie E.
Report of the Roundtable on Legislation, BP75:Dec 75:590

Birrell, G. S.
Dsc, CO1:Mar 76:259:11948, of "Integrated Contracting Systems", CO1:Mar 75:213:11199

Bishop, A. Bruce
Coupled Optimization-Simulation Water Quality Model, with William J. Grenney, EE5:Oct 76:1071: 12452
Multiobjective Planning: Concepts and Methods, with Mac McKee, T. Ward Morgan and Rangesan Narayanan, WR2:Nov 76:239:12563
Multiobjective Planning: New Directions and Methodology, with Mac McKee, T. Ward Morgan and Rangesan Narayanan, Preprint No.2715, Apr 76, 26pp.

Biswas, Hiranmay
See John Fillos, EE2:Apr 76:239:12029

Biswas, Jayanta K.
Three-Dimensional Analysis of Shear Wall Buildings to Lateral Load, with Wai K. Tso, ST5:May 74: 1019:10537
Dsc: Andrew W. Irwin, ST1:Jan 75:357:11039
Clo: ST7:July 75:1616:11401
TR:141:51

Bizal, Thomas
See Michael O'Rourke, ST76:Aug 76:1037

Bjorhovde, Reidar
Elements of Steel Structures — History, State-of-the-Art, and Potential Developments: Columns, Preprint No.2786, Sept 76, 24pp.
The Safety of Structural Steel Columns, Preprint No.2809, Sept 76, 27pp.
Dsc, ST8:Aug 75:1714:11471, of "Illustrations of Reliability-Based Design", ST9:Sept 74:1789:10779

Black, Jared L.
Deepsea Drilling Workshop, with Joel M. Goodman, OE75:June 75:846
Wave Forces on Large Bodies—A Survey of Numerical Methods, OE75:June 75:924

Black, Michael S.
Ultimate Strength Study of Two-Way Concrete Slabs, ST1:Jan 75:311:11077
TR:141:186

Black, William L.
Recent Legislation Impacting on Dredging Projects, Preprint No.2727, Apr 76, 23pp.
Waters of the United States, DIEE:Jan 76:10

Black, William T.
See Ulrich Luscher, TE4:Nov 75:669:11722

Blaisdell, Fred W.
Dsc, HY6:June 76:796:12164, of "Stilling Basin Design for Low Froude Number", HY7:July 75:901:11448
Dsc, HY11:Nov 76:1704:12508, of "Discharge Equations for HS, H, and HL Flumes", HY1:Jan 76:73:11874

Blake, Gilbert T.
See Charles G. Schilling, ST1:Jan 75:31:11049

Bland, Richard L.
Engineers and Computers — Interaction or Reaction, EI2:Apr 75:79:11253
TR:141:288

Blandford, George E.
See Shien T. Wang, TN: ST9:Sept 76:1941:12370

Blaney, G. W.
Dynamic Stiffness of Piles, with Eduardo Kausel and Jose M. Roesset, NMG:June 76:II-1001

Blank, Herbert G.
Dsc, IR1:Mar 75:75:11150, of "Functions to Predict Optimal Irrigation Programs", IR2:June 74:179:10626

Blank, Horace R.
Synthetic Aggregate From Incinerator Residues, EM1:Feb 76:31:11898

Blankenhorn, Paul R.
Enclosed Soak System for Deep Polymer Impregnation of Concrete Bridge Decks, with Richard E. Weyers, Donald E. Kline and Philip D. Cady, TE1:Feb 75:65:11102
TR:141:120

Blascsok, Charles J.
Dsc, CO1:Mar 75:226:11147, of "Basic Construction Principles in Higher Latitudes", CO1:Mar 74:33:10399

Blazey, Douglas R.
Legal Perspective on Water Quality Management, HY5:May 75:595:11320
Errata: HY3:Mar 76:435:11950
TR:141:316

Bleakley, W. B.
Technique to Develop Atlantic OCS Oil and Gas, OE75:June 75:830

Bledsoe, Bert E.
See Carl G. Enfield, IR3:Sept 75:145:11593

Bledsoe, John D.
Dsc, ASCE Annual Report Correction, CE:Apr 76:40

Bleecker, Paul O.
Legal-Institutional Framework for the Continental Shelf, OE75:June 75:1437

Blench, Thomas
Observations of Natural and Man-Made River Spurs, with Victor J. Galay and E. K. Yaremko, WW76:Aug 76:1363
Dsc, HY4:Apr 75:412:11209, of "Factors Determining Bed Forms of Alluvial Streams", HY3:Mar 74:363:10396

Blenkarn, K. A.
See Bernhard Stahl, ST76:Aug 76:419

Bliesner, Ronald D.
Sprinkler Uniformity Effects on Quality of Return Flow, with Lyman S. Willardson, IR76:July 76:508
Dsc, IR2:June 76:269:12165, of "Design of Irrigation Runoff Recovery Systems", IR3:Sept 75:209:11569

Blight, Geoffrey E.
Blight Receives Croes Medal, CE:Mar 76:89
Fracture of Pavement Materials, TE4:Nov 73:801:10139
Dsc: Edwin T. Brown, TE4:Nov 74:1002:10901
Clo: TE3:Aug 75:591:11472
TR:141:24
Migration of Subgrade Salts Damages Thin Pavements, TE4:Nov 76:779:12542

Blinco, Paul H.
Turbulent Structure near Smooth Boundary, with Daryl B. Simons, EM3:June 75:241:11372
Dsc: Robert Gerard, EM3:June 76:581:12162
TR:141:251
See Ruh-Ming Li, WW76:Aug 76:1572

Blomeke, J. O.
The Impact of Nuclear Fuel Cycle Centers on Shipping Special Nuclear Materials and Wastes, EFEEC:Aug 75:181

Blomquist, Marshall W.
See Alphonse E. Zanoni, EE3:June 75:309:11356

Blower, Howard E.
Dsc, CE:Oct 75:35, on Short Span Bridges, CE:July 75:42

Bluestein, Mark H.
See David W. Hendricks, EE4:Aug 76:745:12294

Blume, John A.
See Nathan M. Newmark, PO2:Nov 73:287:10142

Bobee, Bernard
See Hubert Demard, UP2:Nov 75:167:11679

Bock, Paul
See Ashok N. Shahane, HY10:Oct 76:1561:12484

Bockrath, Joseph T.
See John D. Wik, OE75:June 75:1455

Boerger, Frank C.
Economic Impact of Dredging Regulations, with Michael H. Cheney, DIEE:Jan 76:408

Boericke, Ralph R.
Interaction of Multiple Jets with Ambient Current, HY4:Apr 75:357:11247
Dsc: George E. Hecker and Peter J. Smith, HY1:Jan 76:108:11817
Clo: HY8:Aug 76:1142:12280
TR:141:293

Bogardi, Istvan
See Lucien Duckstein, HY3:Mar 75:558:11148
See Ferenc Szidarovsky, EM5:Oct 75:609:11621

Bogner, Neil F.
Dams for Others, EFRLD:Sept 75:137

Boisen, Bradford P.
See David A. Day, CO2:June 75:265:11393

Bole, James B.
Wave Energy Transfer Mechanisms in Wind-Wave Tunnels, WW4:Nov 74:325:10932
Dsc: D. Lee Harris, WW4:Nov 75:459:11677
Clo: WW2:May 76:275:12095
TR:141:167

Boles, William
Planning Pedestrian Environments — A Computer Simulation Model, BP75:Dec 75:224

Bollinger, G. A.
The Seismic Regime in a Minor Earthquake Zone, NMG:June 76:II-917

Bolt, Bruce A.
Seismic Instrumentation of Dams, with Donald E. Hudson, GT11:Nov 75:1095:11697
TR:141:495
See Neville C. Donovan, Preprint No.2805, Sept 76, 19pp.

Bolton, E. F.
Subsurface Drainage Related to Agronomic Factors on Brookston Clay Soil, with Frank R. Hore, IR76: July 76:221

Bomba, John G.
See Jamal J. Azar, TE1:Feb 75:163:11122

Bomze, Herman
See Yong Kwun Chung, OE75:June 75:96

Bonasia, Joseph
See Michael J. McCarthy, OE75:June 75:762

Booker, John R.
Analysis of Creep Settlement of Pile Foundations, with Harry G. Poulos, GT1:Jan 76:1:11826
Finite Element Analysis of Piles in Viscoelastic Soil, with Harry G. Poulos, NMG:June 76:I-425

Boone, Sheldon G.
Problem of Irrigation Return Flows, IR76:July 76:673

Boonlualohr, Pravit
Elastoplastic Torsion of Anisotropic Bars, with Somasundaram Valliappan, EM6:Dec 76:995:12634

Borcherding, John D.
Current and Proposed Construction Research Studies, with Brennon P. Hatley, CO3:Sept 76:547:12423
Improving Productivity in Industrial Construction, CO4:Dec 76:599:12595
Job Dissatisfactions in Construction Work, with Clarkson H. Oglesby, CO2:May 75:415:11390
TR:141:318
See Calin Popescu, CO4:Dec 75:769:11763

Boresi, Arthur P.
See Gordon H. Holze, ST12:Dec 75:2627:11788

Borg, Robert F.
Social and Environmental Concerns in Construction, CO1:Mar 76:1:12007
Dsc, CE:Jan 76:24, on An Engineer Rebuts a Contractor's Charges of Unfair Contracts, CE:Oct 75:75

Borgman, Leon E.
Extremal Statistics in Ocean Engineering, OE75:June 75:117

Borm, Guenter W.
Viscoplastic Constitutive Matrix Corresponding to the Hyperbolic Sine Creep Law, NMG:June 76:I-357

Bosch, Harold R.
See Richard H. Gade, ST7:July 76:1299:12233

Bose, Bishwanath
See Alexander Coull, ST11:Nov 75:2223:11696
See Alexander Coull, TN: ST12:Dec 76:2366:12593

Bossler, John D.
New Adjustment of North American Datum and Surveyor, with William E. Stephens, James R. Plasker, Wesley V. Hull and Douglas R. Lee, SU1: Oct 75:115:11657
Errata: SU1:Dec 76:101:12589
TR:141:324

Botkin, Mark E.
See Franklin Y. Cheng, ST3:Mar 76:609:11993

Botz, James J.
See Bernard D. Alkire, TN: GT8:Aug 76:877:12287

Boughton, Walter C.
Flood Estimation from Short Records, HY3:Mar 76: 241:11996

Bouma, Johannes
Unsaturated Flow During Soil Treatment of Septic Tank Effluent, EE6:Dec 75:967:11783
Dsc: Alan T. Ingham, EE5:Oct 76:1128:12436
TR:141:513

Bounin, Dieter
See R. Richard Avent, TN: ST3:Mar 76:691:11956
See R. Richard Avent, ST9:Sept 76:1917:12413

Bourodimos, Efstathios L.
See Karim A. Abood, HY9:Sept 76:1211:12408

Bouwer, Herman
Infiltration Into Increasingly Permeable Soils, IR1: Mar 76:127:11959

Bowen, Stuart P.
Modeling of Coastal Dredged Material Disposal, DIEE:Jan 76:202

Bowerman, Frank R.
See Nancy E. Folks, EE4:Aug 75:607:11518

Bowers, Nathan A.
Dsc, CE:Apr 75:24, on The Forgotten Engineer: John Stevens and the Panama Canal, CE:Feb 75:54

Bowles, David S.
Low Flow Modeling in Small Steep Watersheds, with J. Paul Riley, HY9:Sept 76:1225:12405
See William J. Grenney, EE4:Aug 76:693:12297

Bowman, Malcolm J.
Pollution Prediction Model of Long Island Sound, OE75:June 75:1084

Bowmer, Kathleen H.
Dsc, IR3:Sept 75:230:11536, of "Environmental Aspects of Aquatic Plant Control", IR3:Sept 74: 231:10810

Boyce, J. S.
Soil-Plant Relationships in Dredged Material Marshes with Particular Reference to Heavy Metal and Nutrient Availability, DIEE:Jan 76:496

Boyer, LeRoy T.
See James J. Adrian, CO1:Mar 76:197:11983
See Carl A. Erikson, CO3:Sept 76:455:12382

Boyet, Wayne E.
Impact of Flooding on Land Transfer Prices, with Kenneth W. Hollman and Wayne L. Sterling, WW76:Aug 76:127

Boyle, William C.
See Richard J. Otis, EE1:Feb 76:175:11895
See Robert Siegrist, EE3:June 76:533:12200
See David K. Sauer, EE4:Aug 76:789:12295

Braaksma, John P.
Method for Designing Airport Terminal Concepts, with John H. Shortreed, TE2:May 75:321:11308
TR:141:219
Dsc, TE3:Aug 75:593:11472, of "Use of Simulation in Airport Planning and Design", TE4:Nov 74:985:10954

Braasch, Daryl A.
See Martin H. David, EE2:Apr 76:433:12045

Bradford, Bruce M.
See John W. Labadie, EE1:Feb 75:27:11115

Bradford, Joe M.
See Robert F. Piest, HY1:Jan 75:65:11069

Bradley, James H.
Dredging and the Environmental Policy Act of 1969, DIEE:Jan 76:39
Dredging and the National Environmental Policy Act of1969, Preprint No.2734, Apr 76, 16pp.

Brady, R. F.
See J. C. Day, IR76:July 76:445

Braestrup, M. W.
Dsc, ST1:Jan 75:353:11039, of "Yield Criterion for Reinforced Concrete Slabs", ST3:Mar 74:631:10409

Bragg, Daniel M.
Candidate Industries and General Island Locations, OE75:June 75:751

Brahma, Suresh P.
Seepage through Opening in Cutoff Wall Under Weir, GT3:Mar 75:329:11204
Errata: GT7:July 75:708:11398
TR:141:275

Brahme, Shashikant B.
See Chintaman V. Gole, WW4:Nov 74:411:10903

Brandes, William A.
Dsc, STN75:Dec 75:II-281, of "New Licensing Philosophy Concerning Soil Structure Interaction", STN75:Dec 75:II-238

Brannan, Robert W.
Ethics: Wisconsin Section Sparks Timely Discussion, CE:May 76:90
Dsc: Ray K. Linsley, CE:Aug 76:24

Brannon, J. M.
Distribution of Toxic Heavy Metals in Marine and Freshwater Sediments, with R. M. Engler, J. R. Rose, P. G. Hunt and I. Smith, DIEE:Jan 76:455

Bransby, Peter L.
Side Friction in Model Retaining-Wall Experiment, with Ian A.A. Smith, GT7:July 75:615:11447
TR:141:358

Bras, Rafael L.
Effects of Urbanization on Catchment Response, with Frank E. Perkins, HY3:Mar 75:451:11196
Dsc: Pedro C. C. Da Costa, HY11:Nov 75:1458:11672
Clo: HY6:June 76:786:12164
TR:141:281

Braun, J. S.
See Bruce M. Thorson, CE:Mar 75:62

Braun, Ronald L.
Benefits of Separating Pedestrians and Vehicles, with Marc F. Roddin, BP75:Dec 75:406

Bravo, Arthur C.
Environmental Systems at Walt Disney World, EE6:Dec 75:887:11755
TR:141:490

Bray, Dale I.
Study of Artificial Cutoffs on Gravel-Bed Rivers, with Andrew J. Cullen, WW76:Aug 76:1399
See Rolf Kellerhals, HY7:July 76:813:12232

Brebbia, Carlos A.
See Paul W. Partridge, HY9:Sept 76:1299:12418

Brekke, Tor L.
See Gregory E. Korbin, GT9:Sept 76:895:12415

Brennan, John E., III
See Robert V. Whitman, ST5:May 75:1067:11309

Breslauer, Stephen K.
Session IV — Waste Products, EFEEC:Aug 75:414

Bresler, Eshel
See Daniel Shimshi, IR1:Mar 75:1:11170
See Gad Strateener, IR1:Mar 75:13:11169

Breth, Herbert
See Dieter Stroh, NMG:June 76:II-686

Brevik, Iver
Partial Wave Damping in Pneumatic Breakwaters, HY9:Sept 76:1167:12374

Brewer, Kenneth A.
Regional Transport Development and Economic Growth, with Robert O. Richards, Jr., TE2:May 76:271:12126

Bridge, Russell Q.
Dsc, with Kuldeep S. Virdi, ST8:Aug 75:1716:11471, of "Concrete Encased Steel Columns—Design Tables", ST9:Sept 74:1865:10807

Bridgeman, S. G.
See J. William Kamphuis, OE75:June 75:197

Brierley, Gary S.
See Wesley E. Stimpson, GT76:Aug 76:1

Briggs, Karl
Dsc, TE4:Nov 74:1000:10901, of "Planning Criteria for Bikeways", TE3:Aug 73:609:9928

Briggs, Oliver H., Jr.
Dsc, CE:May 76:24, on Converting Solar Energy to Hydrogen: Answer to U.S.'s Long-Range Energy Needs?, CE:Jan 76:63

Briggs, Terrence M.
See C. Scott Clark, EE2:Apr 76:375:12038

Briller, Richard
Discounted Cash Flow Analysis to Select Equipment, EE3:June 76:595:12190
Dsc: Thomas E. Wester, EE6:Dec 76:1312:12583

Brisbin, Sterling G.
Concentric Waste-Treatment Plant Saves Land, CE:Feb 76:74
Dsc: Robert K. Morris, CE:Oct 76:30

Britain, Kenneth E.
1976 Stephen D. Bechtel Pipeline Engineering Award Presented to Kenneth E. Britain, CE:Oct 76:100

Brocard, Dominque N.
One-Dimensional Temperature Predictions in Unsteady Flows, with Donald R.F. Harleman, HY3:Mar 76:227:11982

Brock, Richard R.
Hydrodynamics of Perched Mounds, HY8:Aug 76: 1083:12305

Brodersen, Randolph M.
Use of an EIR Process in Controlling Urban Sprawl, with Leonard Ortolano, UP1:Aug 76:199:12358

Brodetzky, Moses
Dsc, DOJ Puzzler, CE:July 76:26

Brodeur, Joseph C.
Dsc, CE:Sept 76:36, on New Orleans Grows on Deep Piles, CE:Apr 76:73

Bromham, Barry
Dsc, ST6:June 76:1275:12166, of "Durability of Concrete in Seawater", ST8:Aug 75:1679:11516

Broms, Bengt B.
Failure of Anchored Sheet Pile Walls, with Hakan Stille, GT3:Mar 76:235:12000
See K. Rainer Massarsch, GT75:June 75:II-260
See Hakan Stille, NMG:June 76:II-611
See K. Rainer Massarsch, GT10:Oct 76:1041:12476

Broome, Kenneth R.
Existing and Planned Energy Complexes, EFEEC: Aug 75:24

Brotchie, John F.
Economic Measure of Benefits of Transportation, TE1:Feb 76:17:11888

Brough, John Capen, Jr.
Memoir of, TR:141:539

Broughton, Robert S.
See Frank R. Hore, IR76:July 76:138
See G. V. Eades, IR76:July 76:155
See Ashim K. Bhattacharya, Preprint No.2773, Sept 76, 18pp.

Brown, Bevan W., Jr.
Development of the Water Resources in the Tennessee Valley Region, Preprint No.2799, Sept 76, 22pp.

Brown, Colin B.
Arrangements of Separate Elastic Bodies, EM6:Dec 76:971:12635
Evergreen Point Bridge Maintenance Problems, with D. R. Christensen and G. F. Demich, ST76:Aug 76: 189

Brown, Colin E.
Effects of Deforestation of Slopes, with Maw S. Sheu, GT2:Feb 75:147:11141
Dsc: Donald H. Gray, Barry Bevier and Frank Somogyi, GT1:Jan 76:117:11816
Clo: GT8:Aug 76:884:12279
TR:141:218

Brown, Douglas R.
See James Warner, GT6:June 74:653:10606

Brown, Edwin T.
Volume Changes in Models of Jointed Rock, TN: GT3:Mar 76:273:11953
Dsc, TE4:Nov 74:1002:10901, of "Fracture of Pavement Materials", TE4:Nov 73:801:10139

Brown, Linfield C.
Statistical Evaluation of Reaeration Prediction Equations, EE5:Oct 74:1051:10849
Dsc: Cheng H. Chiang, EE4:Aug 75:682:11467; Hubert J. Morel-Seytoux and Daniel H. Lau, EE5:Oct 75:859:11596
Clo: EE3:June 76:689:12161
TR:141:161

Brown, Norman L.
Corner Restoration in Missouri, SU1:Oct 75:101: 11658
TR:141:353

Brown, Peter T.
See Harry G. Poulos, TE2:May 75:399:11272

Brown, Ralph E.
Vibroflotation and Terra-Probe Comparison, with Andrew J. Glenn, GT10:Oct 76:1059:12498
Vibroflotation Compaction of Granular Hydraulic Fills, Preprint No.2657, Apr 76, 30pp.
Dsc, GT75:June 75:II-346, of "In Situ Measurement of Volume Change Characteristics", GT75:June 75: II-279

Brown, Robert C., Jr.
Computer Analysis of Segmentally Erected Bridges, with Ned H. Burns, ST4:Apr 75:761:11218
TR:141:223

Brown, Robert Wade
Dsc, GT2:Feb 75:211:11087, of "Planning and Performing Compaction Grouting", GT6:June 74: 653:10606
Dsc, GT3:Mar 75:346:11149, of "Review of Expansive Soils", GT6:June 74:667:10609

Brown, Roland M.
See Ralph D. Webb, CO4:Dec 75:785:11753

Brown, Russell H.
Minimum Cost Selection of One-Way Slab Thickness, ST12:Dec 75:2585:11785
Dsc: Ignacio Martin, ST7:July 76:1529:12226; Antoine E. Naaman, ST9:Sept 76:1959:12366; C. N. Srinivasan, ST9:Sept 76:1961:12366; David P. Gustafson, ST10:Oct 76:2093:12441; Manhar C. Thakkar, ST10:Oct 76:2094:12441; Krishnaiyengar Rajagopalan, ST12:Dec 76:2378: 12588; B. V. Subrahmanyam, ST12:Dec 76: 2381:12588
TR:141:500

Brown, Stephen F.
Dsc, TE4:Nov 75:832:11673, of "Significance of Variably Confined Triaxial Testing", TE4:Nov 74: 827:10911

Brownell, Jonathan N.
Citizens Groups and Public Participation: Problems and Observations, EFEEC:Aug 75:388

Browzin, Boris S.
Exit of Ground Waters on Drainage Boundaries, GT2:Feb 76:159:11909
Dsc, IR2:June 74:206:10568, of "Approximate Solution for Unconfined Seepage", IR1:Mar 73:71: 9607

Bruch, John C., Jr.
Comparison of Numerical Schemes, with Roland W. Lewis, NMG:June 76:I-115
Dsc, IR1:Mar 75:70:11150, of "Subsurface Drainage Solutions by Galerkin's Method", IR1:Mar 74:1: 10397

Bruggers, D. E.
See J. R. Dunkelberg, CE:Aug 75:32

Brumund, William F.
Compressibility of Undisturbed Submarine Sediments, with Gordon W. Callender, Jr., OE75:June 75:363
See Samuel P. Clemence, GT6:June 75:537:11369

Brune, Arthur W.
Performance of Pennsylvania Highway Drainage Inlets, with Walter H. Graf, Erik Appel and Peter P. Yee, HY12:Dec 75:1519:11801
TR:141:485

Brungraber, Robert J.
See Jai B. Kim, GT1:Jan 76:87:11849

Bruschin, Jacques
Dsc, HY4:Apr 75:425:11209, of "Transformation of Moody Diagram", HY6:June 74:797:10624

Bruton, J. Edward
See Graham P. Harris, TE3:Aug 76:537:12300

Brutsaert, Wilfried
Pumping of Aquifer with Viscoelastic Properties, with M. Yavuz Corapcioglu, HY11:Nov 76:1663:12541

Bruun, Per Moller
Parameters Affecting Stability of Rubble Mounds, with Palmi Johannesson, WW2:May 76:141:12136
Dsc, with Franciscus Gerritsen, WW4:Nov 74:389:10903, of "Characteristics and Behavior of Pacific Coast Tidal Inlets", WW3:Aug 73:325:9927
Dsc, WW4:Nov 74:403:10903, of "Regime Equations and Tidal Inlets", WW3:Aug 73:393:9952
Dsc, WW4:Nov 75:461:11677, of "Engineering Challenges of Dredged Material Disposal", WW1:Feb 75:1:11096

Bryan, Ross H.
Long Line Production of Building Elements in United States, CO1:Mar 75:143:11188
TR:141:209

Bryant, Edward A.
See George P. Fulton, CE:June 76:52

Bryant, James O., Jr.
See Walter G. Gilbert, EE2:Apr 75:273:11205

Bryson, Maurice C.
See Neil S. Grigg, UP1:May 75:77:11313

Buchert, Kenneth P.
Dsc, CEM Appeal, CE:Jan 76:26
A Home-Study Program on Civil Engineering Management, CE:Mar 75:81
TR:141:128

Buchholz, Duane D.
Meeting the Challenge of Constructing a Reservoir Bypass Pipeline, with Roger T. Menlove, Preprint No.2644, Apr 76, 19pp.

Buehler, Bob
Dams in Relation to Balanced Public Safety, EFRLD:Sept 75:27
Individual Statement During Summarization Session, EFRLD:Sept 75:199
Monetary Values of Life and Health, HY1:Jan 75:29:11047
Dsc: John R. Christofferson, HY9:Sept 75:1297:11535; Leo R. Beard, HY11:Nov 75:1455:11672
Clo: HY3:Mar 76:418:11950
TR:141:180
Upstream Flood Lowering in Reservoirs, HY2:Feb 76:151:11911
Clo: HY12:Dec 76:1784:12586

Buehler, Bob J.
Corps Guidelines for Dam Safety Inspection Need Revamping, CE:Jan 75:74
Dsc: Monroe M. Johnston, CE:Mar 75:24; M. Riazul Hasan, CE:June 75:36; Russell W. Revell, CE:July 75:38; Frederic T. Mavis, CE:Aug 75:32
Clo: CE:Sept 75:24
TR:141:31

Bugge, William A.
Bugge Relates Indonesian Experiences in Executive "Peace Corps", CE:Feb 76:94

Bugliarello, George
The Translation of Research Results Into Practice, IR76:July 76:1

Bukata, Robert P.
See Graham P. Harris, TE3:Aug 76:537:12300

Bungey, John H.
See Robert J. Cope, ST4:Apr 75:779:11230

Burchert, Kenneth P.
Dsc, PO2:Dec 74:211:10976, of "Stability and Dynamic Analyses of Cooling Tower", PO2:Nov 73:339:10141

Burdette, Edwin G.
Liner Anchorage Tests, with Larry W. Rogers, ST7:July 75:1455:11432
TR:141:347
See Ted L. Winstead, ST10:Oct 75:2103:11635
See Chang-ning Sun, TN: ST5:May 76:1141:12128

Burdick, David
See James Falick, Preprint No.2701, Apr 76, 23pp.

Burdick, J. Clement, III
Analysis of Oxygen Demand of Sediments, DIEE:Jan 76:319

Burgan, Ray W., Jr.
Bridge Construction Surveying, CO2:June 74:105:10602
Dsc: Peter D. Courtois, CO4:Dec 74:655:10970; Luke M. Snell, CO4:Dec 74:657:10970
Clo: CO3:Sept 75:665:11533
TR:141:21

Burges, Stephen J.
Systems Aspects of Water Resources Planning in America: 1776 to 1976, Preprint No.2754, Sept 76, 34pp.

Burgi, Philip H.
Hydraulic Design of Vertical Stilling Wells, HY7:July 75:801:11451
Dsc: Chian-Min Wu, HY6:June 76:799:12164
Clo: HY12:Dec 76:1768:12586
TR:141:381

Burke, Thomas D.
Notching River Training Structures: Missouri River, WW76:Aug 76:1647

Burkham, Durl E.
Resistance Equation for Alluvial-Channel Flow, with David R. Dawdy, HY10:Oct 76:1479:12462

Burki, Naveed K.
Photoelastic Analysis of a Cofferdam, with Rowland Richards, Jr., GT2:Feb 75:129:11135
TR:141:212

Burley, Eldon
See Roger C. Harvey, GT6:June 76:662:12163

Burman, Robert D.
Intercontinental Comparison of Evaporation Estimates, IR1:Mar 76:109:11958
Dsc: George H. Hargreaves, IR4:Dec 76:471:12587

Burmann, Werner
Water Hammer in Coaxial Pipe Systems, HY6:June 75:699:11374
Errata: HY12:Dec 75:1554:11744
TR:141:345

Burnes, John A.
Dsc, HY5:May 75:628:11270, of "Use of Decision Theory in Reservoir Operation", HY6:June 74:809:10586

Burnham, M. W.
See R. P. Webb, WW76:Aug 76:329

Burnham, R. A.
Dsc, CE:Oct 76:26, on The Students Speak Out, CE:Apr 76:99

Burns, Ned H.
See Robert C. Brown, Jr., ST4:Apr 75:761:11218

Burns, Rex A.
Nonstructural Flood Control — A Case Study, with David H. Pilgrim, WW76:Aug 76:552

Burns, William C.
See Stephen E. Smith, CO4:Dec 75:907:11776

Burnside, Douglas F.
See James P. Cassidy, ST76:Aug 76:884

Burr, Eugene E.
Impact of Air Quality on Bicyclists, with Terry L. Miller, BP75:Dec 75:571

Burros, Raymond H.
Probability of Failure of Building from Fire, ST9:Sept 75:1947:11567
TR:141:418

Burroughs, Edward A.
Fifty-Year Development Construction of Steel Girder Bridges, CO3:Sept 75:463:11549
TR:141:359

Burton, Kenneth T.
See Thomas T.C. Hsu, ST1:Jan 74:209:10277

Burton, Peter L.
See Brian A. Chappell, GT8:Aug 75:733:11495

Busching, Herbert W.
American Road Building - Fifty Years of Progress, with Randolph Russell, CO3:Sept 75:565:11577
TR:141:414

Butler, Dwain K.
Dsc, with Robert S. Bernard, GT1:Jan 75:71:11037, of "Projectile Penetration of Elastic-Plastic Earth Media", GT3:Mar 74:279:10414

Butler, H. Lee
See Donald C. Raney, HY9:Sept 76:1269:12425

Butler, Jerome R., Jr.
Competitive Alternative to Minority Quotas/Goals, with Doug Hunt, CE:Sept 75:104
TR:141:389

Butler, Roger A.
Subsidence Over Soft Ground Tunnel, with Delon Hampton, GT1:Jan 75:35:11074
Dsc: James A. Ramsay, GT12:Dec 75:1297:11743; William H. Hansmire and Edward J. Cording, GT3:Mar 76:259:11949
TR:141:187

Byers, William G.
Rating and Reliability of Railway Bridges, ST76:Aug 76:153
Dsc, ST10:Oct 76:2096:12441, of "Stress Cycles for Fatigue Design of Railroad Bridges", ST1:Jan 76:203:11857

Byington, Marvin L.
See Virginia Fairweather, CE:Aug 75:57

Byrne, Peter M.
See W. D. Liam Finn, GT8:Aug 76:841:12323

Byron, John C.
Albany South Mall: Largest State Government Complex, CE:May 76:66

Cable, Carl C.
Environmental Costs — Impact on Dredging, with William R. Pearson, DIEE:Jan 76:353

Cady, Philip D.
See Paul R. Blankenhorn, TE1:Feb 75:65:11102

Caffrey, Patrick
Evaluation of Environmental Impact of Landfills, with Martin David and Robert K. Ham, EE1:Feb 75:55:11119
TR:141:232

Cahill, Harold P., Jr.
Productivity and the Construction Grants Program for Wastewater Treatment Works: An EPA View, PROD:Aug 76:205

Cahoon, C.
See D. Wozniak, EE3:June 76:567:12197

Cain, John F.
Fifty-Year Development — Construction of Steel Pipeline Suspension Bridges, CO4:Dec 75:733:11768
Dsc: Blair Birdsall, CO3:Sept 76:572:12362
TR:141:488

Caine, Bruce T.
The Second Most Frequent Mode of Transportation, with Robert L. Siegel, BP75:Dec 75:41

Cairns, John, Jr.
See Kenneth L. Dickson, HY7:July 75:965:11463

Cairo, Patrick R.
See Carmen F. Guarino, EE5:Oct 76:953:12473

Calkins, Darryl J.
Passage of Ice at Hydraulic Structures, with George D. Ashton, WW76:Aug 76:1726

Calkins, Myron D.
Dsc, EI2:Apr 75:250:11268, of "Effectiveness of Present Operating Procedures and of the PAC Structure", EI2:Apr 75:247:11268

Callender, Gordon W., Jr.
See William F. Brumund, OE75:June 75:363

Calsing, Ronald
See Michael W. O'Neill, GT8:Aug 76:857:12318

Calvert, James D.
Dsc, PO1:July 75:137:11400, of "New Approach to Site Selection Studies", PO1:July 74:63:10643

Calvert, James D., Jr.
Dsc, PO2:Nov 76:232:12509, of "Integrated River System Operation in a Major Flood", PO1:Jan 76:63:11825

Cameron, Dugald J.
Boase Award to Cameron, CE:Apr 76:95

Cameron, Francis X.
Coastal Management: Impact on the Ocean Engineer, OE75:June 75:1451

Campbell, David S.
Computerized Analysis of Rock Slope Stability, with John T. Christian and Herbert H. Einstein, GT76:Aug 76:415

Campbell, John W.
Alberta's Viewpoint on Risk, EFRLD:Sept 75:147

Campbell, John Y.
Computing Education through Program Evaluation, EI2:Apr 75:149:11240
TR:141:241

Campbell, Melvin D.
See Roy D. Gear, Preprint No.2720, Apr 76, 18pp.

Campbell, Noble J.
The Agency, The Owner, and The Engineer, in Texas, EFRLD:Sept 75:99

Campbell, Pressley L.
Automated Hydrographic Survey Systems, OE75:June 75:1181

Campbell, Stephen J.
Structural Design and Analysis of Atlanta Center, Ltd., with Bill L. Gunnin, ST76:Aug 76:771

Campbell, T. Ivan
See Larp Chitnuyanondh, T76:Aug 76:476
See Barrington deV. Batchelor, ST9:Sept 76:1789: 12417

Canfield, Monte, Jr.
America's Energy Futures, EFEEC:Aug 75:6

Cann, Richard G.
Scale Model Study of Los Angeles International Airport, TE3:Aug 75:455:11489
TR:141:315

Cannon, Robert E.
Ecology of Blue-Green Algal Viruses, with Miriam S. Shane and Eugene DeMichele, EE6:Dec 74:1205: 11012
Errata: EE5:Oct 75:866:11596
TR:141:181

Cantor, Louis
Legal Aspects of Open Cut Construction, with Robert A. Rubin and Eugene H. Goldberg, CO4: Dec 75:923:11767
TR:141:481

Capestany, George J.
Dsc, EE4:Aug 75:678:11467, of "Philadelphia Pilots--Builds Oxygen Activated Sludge", EE4:Aug 74:919: 10722

Carcaterra, Thomas
Dsc, CE:Jan 76:26, on Protecting Your Firm against Liability Claims, CE:June 75:66

Cardwell, Rick D.
Sediment and Elutriate Toxicity to Oyster Larvae, with Charles E. Woelke, Mark I. Carr and Eugene W. Sanborn, DIEE:Jan 76:684

Careaga, Alfredo
See Emilio Rosenblueth, TN: EM3:June 76:563: 12168

Carey, Thomas W.
Dsc, Engineering Correspondence Schools, CE:Aug 76:24

Carlson, Dale A.
See Leroy C. Reid, Jr., EE2:Apr 74:339:10443

Carlson, Lawrence
First Bridge Across the Yukon River, with Roy C.J. Dreyer and Rodney Platzke, CE:Aug 76:47

Carney, J. M.
Bibliography on Wood and Plywood Diaphragms, ST11:Nov 75:2423:11737
TR:141:485

Caro, J. H.
See M. H. Frere, Preprint No.2667, Apr 76, 24pp.

Caron, Octave
See Marcel Frenette, WW76:Aug 76:1229

Carpenter, S. H.
See H. S. Chang, NMG:June 76:1-526

Carr, Chris
See Joseph T. DeAlteris, OE75:June 75:225

Carr, James R.
Dsc, HY8:Aug 75:1114:11470, of "Hydrology of Porous Pavement Parking Lots", HY12:Dec 74: 1739:11010
Dsc, TE4:Nov 76:887:12511, of "Cable-Stayed Versus Classical Suspension Bridge", TE2:May 76: 291:12130

Carr, Mark I.
See Rick D. Cardwell, DIEE:Jan 76:684

Carr, Robert I.
See Mark H. Jordan, CO3:Sept 76:511:12392
See Joseph C. Dean, CO3:Sept 76:535:12422

Carreira, Domingo J.
See Zdenek P. Bazant, ST10:Oct 75:2117:11632

Carroll, Joe H.
See Peter J. Shuba, DIEE:Jan 76:645

Carroll, William J.
William J. Carroll Takes Office in Philadelphia, CE: Oct 76:93

Carstens, Robert L.
Optimizing Economic Return on Highway Investment, TE4:Nov 76:665:12529

Carter, Everett C.
Planning Air Transport Network in Appalachia, with Edward K. Morlok, TE3:Aug 75:569:11499
TR:141:348

Carter, H. H.
Analysis and Interpretation of a Heated Jet, with Donald W. Pritchard and S. R. Rives, OE75:June 75:1420

Carter, Jimmy
Ford and Carter—Their Views on Technology, CE: Oct 76:70

Carter, Joe D.
Dam Safety — Texas Style, EFRLD:Sept 75:79

Carter, John L.
Effects of Shock Temperature on Biological Systems, with William F. Barry, EE2:Apr 75:229:11239
Dsc: Arthur H. Benedict, EE6:Dec 75:1039:11741
Clo: EE4:Aug 76:864:12277
TR:141:287

Carthew, Geoffrey A.
See Denny S. Parker, EE6:Dec 75:985:11789

Cartwright, Vern
Computer Cartography Offers County Unlimited Combinations and Considerable Savings, with Joseph P. Alessandri, CE:Nov 76:60

Caselton, W. F.
Long-Term Operation of Storage Hydro Projects, with Samuel O. Russell, WR1:Apr 76:163:12089

Cass, James R., Jr.
Early Crises in the Port of Boston, Preprint No.2774, Sept 76, 25pp.

Cassell, A. C.
Dsc, ST7:July 75:1620:11401, of "Conditioning of Structural Flexibility Matrix", ST8:Aug 74:1677: 10763

Cassidy, James P.
User Documentation for Engineering Software, with Norman R. Greve and Douglas F. Burnside, ST76: Aug 76:884

Cassis, Juan H.
Optimum Structural Design with Dynamic Constraints, with Lucien A. Schmit, Jr., ST10:Oct 76:2053:12491

Castiel, Joseph
See Robert A. Grace, OE75:June 75:523

Castro Salas, Gonzalo
Factors Affecting Liquefaction and Cyclic Mobility, with Steve J. Poulos, Preprint No.2752, Sept 76, 34pp.

Liquefaction and Cyclic Mobility of Saturated Sands, GT6:June 75:551:11388
Dsc: David A. Howells, GT3:Mar 76:265:11949; Mishac K. Yegian and Issa S. Oweis, GT3:Mar 76:265:11949; Issa S. Oweis, GT6:June 76:654:12163
Clo: GT12:Dec 76:1277:12585
TR:141:340
Shear Strength of Soils and Cyclic Loading, with John T. Christian, GT9:Sept 76:887:12387

Catalan, J. Morla
Earth Slope Reliability by a Level-Crossing Method, with C. Allin Cornell, GT6:June 76:591:12214

Cataloglu, Altay
Refined Stress Analysis of Human Aortic Heart Valves, with Phillip L. Gould and Richard E. Clark, EM1:Feb 76:135:11924

Cavanagh, C. R.
Community Development Implications of Energy Complex Construction, EFEEC:Aug 75:280

Cavaroc, Victor V., Jr.
See Jerry L. Machemehl, OE75:June 75:313

Caves, Joel L.
Flood Control for an Island Sited Nuclear Plant, WW76:Aug 76:872
Dsc, with Heber T. Newton, PO2:Nov 76:229:12509, of "Flood Protection of Crystal River Unit 3 Nuclear Plant", PO1:July 75:85:11458

Cech, Irina
Quantitative Assessment of Changes in Urban Runoff, with Karen Assaf, IR1:Mar 76:119:11957

Cecilio, Catalino B.
Spillway Design for Series of Reservoirs, with Brook A. Kraeger and Vefa Yucel, HY10:Oct 74:1329:10851
Dsc: Constantine Voutyras, HY8:Aug 75:1107:11470
Errata: HY6:June 75:788:11340
Clo: HY1:Jan 76:95:11817
TR:141:132

Cederwall, Klas
Gross Parameter Solutions of Jets and Plumes, HY5:May 75:489:11285
TR:141:309
Sediment Flushing after Dredging in Tidal Bays, with Torbjorn Svensson, HY7:July 76:935:12229

Ceradini, Giulio
Steel Orthotropic Plates under Alternate Loads, with Carlo Gavarini and Mario P. Petrangeli, ST10:Oct 75:2015:11618
TR:141:432

Cermak, Jack E.
Dsc, SDNPF:Dec 73:III-99, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81
See John D. Stevenson, SDNPF:Dec 73:III-81
See Jon A. Peterka, ST6:June 75:1255:11373
See Jon A. Peterka, ST3:Mar 76:533:11980

Cesareo, David J.
Infiltration-Inflow Analysis, with Richard Field, EE5:Oct 75:775:11645
Dsc: Jong-Song Chien, EE2:Apr 76:497:12010
Clo: EE5:Oct 76:1126:12436
TR:141:465

Chaker, Amal A.
See Alfredo H-S. Ang, EM4:Aug 75:373:11514

Chakrabarti, P.
See Anil K. Chopra, EM3:June 76:497:12209

Chakrabarti, Satyananda
Distribution of Subgrade Reaction Using Substructuring Finite Element Methods, with Nishikant R. Vaidya and Donald E. Shaw, NMG:June 76:I-551

Chakrabarti, Subrata K.
Nonlinear Wave Forces on Halfcylinder and Hemisphere, with Robert A. Naftzger, WW3:Aug 74:189:10710
Dsc: Philip L-F. Liu, WW2:May 75:221:11274; Harihara Raman and Paruchuri Venkatanarasaiah, WW3:Aug 75:299:11473
Clo: WW1:Feb 76:91:11882
TR:141:109
Wave Forces on Vertical Circular Cylinder, with Allan L. Wolbert and William A. Tam, WW2:May 76:203:12140
Dsc, WW2:May 74:163:10509, of "Extreme Wave Height Distributions Over Oceans", WW3:Aug 73:355:9939
Dsc, WW1:Feb 75:115:11091, of "Prediction of Wind Wave Heights", WW1:Feb 74:1:10324
Dsc, with Dennis C. Cotter, WW3:Aug 75:303:11473, of "Wave Forces on Cylinders Near Plane Boundary", WW4:Nov 74:345:10944
Dsc, WW4:Nov 76:491:12512, of "Transverse Forces on Vertical Cylinders in Waves", WW1:Feb 76:49:11934
See Robert A. Naftzger, OE75:June 75:959

Chambon, R.
See F. Darve, NMG:June 76:I-264

Chan, Clarence K.
Pneumatic Sinusoidal Loading System, with John Paul Mulilis, TN: GT3:Mar 76:277:11953
See Robert M. Pyke, GT4:Apr 75:379:11251
See Robert T. Wong, GT6:June 75:571:11396
See Marshall L. Silver, GT5:May 76:511:12145
See Pedro De Alba, GT9:Sept 76:909:12403

Chan, Daniel T.-L.
Entrainment and Drag Forces of Deflected Jets, with Jung-Tai Lin and John F. Kennedy, HY5:May 76:615:12141
Submerged Buoyant Jets in Quiscent Fluids, with John F. Kennedy, HY6:June 75:733:11383
Dsc: Subhash C. Mehrotra, HY12:Dec 75:1554:11744
TR:141:351
Dsc, with John F. Kennedy, HY8:Aug 75:1105:11470, of "Buoyant Forced-Plumes in Cross Flow", HY9:Sept 74:1203:10805

Chan, Paul C.K.
Approximate Analysis of Multistory Multibay Frames, with Arthur C. Heidebrecht and Wai K. Tso, ST5:May 75:1021:11302
TR:141:285

Chandrasekaran, D.
Characteristics of Proportional Weirs, with Nagar S. Lakshmana Rao, HY11:Nov 76:1677:12560

Chandrashekar, M.
Sparsity Oriented Analysis of Large Pipe Networks, with K. H. Stewart, HY4:Apr 75:341:11260
Dsc: Trevor R. Fietz, HY11:Nov 75:1461:11672; Anand Prakash, HY1:Jan 76:109:11817
Clo: HY8:Aug 76:1143:12280
TR:141:299

Chang, Bin
Dsc, with Ken P. Chong, ST7:July 76:1517:12226, of "Rainwater Ponding on Beam-Girder Roof Systems", ST9:Sept 75:1913:11564

Chang, David J.
Guide Criteria to Bridge and Permit Loads, ST6:Aug 76:170

Chang, H. S.
Numerical Analysis of Thermal Crack Propagation in Pavement Overlays, with Robert L. Lytton and S. H. Carpenter, NMG:June 76:I-526

Chang, Howard H.
Computer Modeling of Erodible Flood Channels and Deltas, with Joseph C. Hill, HY10:Oct 76:1461: 12485

Chang, Shih-Cheng
Dsc, HY4:Apr 75:435:11209, of "Urban Runoff by Linearized Subhydrographic Method", HY8:Aug 74:1141:10766

Chang, Tse-Yung P.
Physical Properties of Premixed Polymer Concrete, with Howard L. Stephens, ST11:Nov 75:2293: 11704
Dsc: Krishnaiyengar Rajagopalan, ST7:July 76: 1520:12226
TR:141:457

Chang, Yung-chi
Transient Drainage Flow Analysis for a Coastal Site, with Yun-jui Tsai, OE75:June 75:1046

Chang-Liang, Victor
See Eduardo Kausel, EM6:Dec 75:909:11742

Chantler, Adrian G.
Dsc, WW4:Nov 74:409:10903, of "Regime Equations and Tidal Inlets", WW3:Aug 73:393:9952

Chapman, Charles L.
See R. Richard Avent, ST4:Apr 76:821:12061

Chapman, K. Ronald
Dsc, CE:May 76:32, on William D. Henderson: Man, Engineer, Priest Minister, CE:Mar 76:63

Chappell, Brian A.
Electro-Osmosis Applied to Unstable Embankment, with Peter L. Burton, GT8:Aug 75:733:11495
Dsc: Donald H. Gray, GT1:Jan 76:119:11816
TR:141:391

Characklis, William G.
See Philip B. Bedient, IR76:July 76:374

Charnoff, Gerald
Desirable Modifications in Regulatory and Licensing Activities, EFEEC:Aug 75:356

Chassie, Ronald G.
States Intensifying Efforts to Reduce Highway Landslides, with Roger D. Goughnor, CE:Apr 76: 65

Chatterjee, Arun
Distribution of Benefits of Public Transit Projects, with Kumares C. Sinha, TE3:Aug 75:505:11497
TR:141:341
Mode Choice Estimation for Small Areas, with Kumares C. Sinha, TE2:May 75:265:11303
Errata: TE2:May 76:450:12094
TR:141:198
See Zuhair Abou-Loghd, TE2:May 76:347:12120

Chatterjee, Mukul Ranjan
See Ram Kinkar Ghosh, CO1:Mar 76:227:11988

Chau, V. Nguyen
See Heinz Stefan, HY11:Nov 76:1613:12514

Chaudan, Hernanda S.
See Pratap Singh, IR4:Dec 74:513:10975

Chaudhary, Virendra K.
See Hota V.S. GangaRao, EM1:Feb 75:25:11130

Chaudhry, A. R.
See A. S. Balasubramaniam, NMG:June 76:I-390

Chaudhry, Fazal H.
Chow's General Hydrologic Model, with Maria A. Simoes and Walter M. Ferreira Filho, TN: HY9: Sept 76:1387:12368
General Linear Hydrologic Response Models, WW76:Aug 76:367
Sprinkler Uniformity Measures and Skewness, IR4: Dec 76:425:12620

Chaudhry, Mohammad Hanif
Dsc, PO2:Dec 74:217:10976, of "Start-Up Performance, Hyatt-Thermalito Power Complex", PO2:Nov 73:405:10169

Chaudhuri, Malay
See N. Sriramulu, EE2:Apr 75:271:11205
See Pushpavadan P. Oza, EE6:Dec 76:1255:12633

Chawla, Amrik S.
Effect of Drains on Pressures Below Structures, GT1: Jan 76:15:11827
Stability of Structures with Intermediate Filters, HY2:Feb 75:223:11139
TR:141:227

Chen, Andrie C.T.
Constitutive Equations and Punch-Indentation of Concrete, with Wai F. Chen, EM6:Dec 75:889: 11809
Dsc: Krishnaiyengar Rajagopalan, EM6:Dec 76: 1095:12584
TR:141:499
Constitutive Relations for Concrete, with Wai F. Chen, EM4:Aug 75:465:11529
Errata: EM3:June 76:590:12162
TR:141:355

Chen, Bill H.
See Patrick K. Takahashi, PO1:July 75:111:11455

Chen, Chang
Dsc, with Garry J. Patterson and Don K. Croneberger, PO2:Nov 73:429:10111, of "Interaction of Soil and Power Plants in Earthquakes", PO2:Oct 72:273:9242
See Dale R. Bervig, STN75:Dec 75:II-351

Chen, Cheng-lung
Flow Resistance in Broad Shallow Grassed Channels, HY3:Mar 76:307:11994

Chen, Choong-Kong
See Raymond N. Yong, EM2:Apr 76:345:12081

Chen, Kenneth Y.
Evaluation Strategies of Metal Pollution in Oceans, with R. Addis Lockwood, EE2:Apr 76:347:12023
Mobility of Trace Metals during Open Water Disposal of Dredged Material and Following Resedimentation, with James C.S. Lu and Amancio Z. Sycip, DIEE:Jan 76:435
Trace Metals in Open Water Disposal of Dredged Material, with James C.S. Lu and Amancio Z. Sycip, WW4:Nov 76:443:12546
See Nancy E. Folks, EE4:Aug 75:607:11518
See Naresh K. Rohatgi, EE3:June 76:675:12194

Chen, Min-Chu
See Robert T. Hudspeth, WW3:Aug 76:353:12284

Chen, Wai F.
Behavior of Fabricated Tubular Columns Under Biaxial Bending, with D. A. Ross, Preprint No.2659, Apr 76, 21pp.
Plasticity Solutions for Slopes, with Nimitchai Snitbhan, NMG:June 76:II-731
Tests and Analysis of Beam-to-Column Web Connections, with Glenn P. Rentschler, ST76:Aug 76:957
See Negussie Tebedge, ST3:Mar 74:579:10400
See Harshavardhan C. Mehta, TE1:Feb 75:1:11103
See Einar Dahl-Jorgensen, TE1:Feb 75:29:11101
See Andrie C.T. Chen, EM4:Aug 75:465:11529
See Andrie C.T. Chen, EM6:Dec 75:889:11809

See John Parfitt, Jr., ST1:Jan 76:189:11854
See Harshavordhan C. Mehta, TE2:May 76:185:12102
See Hugh L. Davidson, NMG:June 76:I-205
See Nimitchai Snitbhan, NMG:June 76:II-744

Chen, Yeou-San
See Robert E. McDonald, ST1:Jan 76:35:11850

Chen, Yung H.
See Peter F. Lagasse, DIEE:Jan 76:556
See Ruh-Ming Li, WW76:Aug 76:377

Cheney, Henry W.
Public Participation from a Utility's Viewpoint: Benefits and Problems, EFEEC:Aug 75:373

Cheney, James A.
Dsc, GT12:Dec 74:1304:10973, of "Yielding of Sand in Plane Strain", GT5:May 74:491:10540
Dsc, with Kandiah Arulanandan, GT12:Dec 75:1301:11743, of "Fundamentals of Liquefaction under Cyclic Loading", GT5:May 75:423:11284

Cheney, Michael H.
See Frank C. Boerger, DIEE:Jan 76:408

Cheng, Franklin Y.
Nonlinear Optimum Design of Dynamic Damped Frames, with Mark E. Botkin, ST3:Mar 76:609:11993
Ultimate Instability of Earthquake Structures, with Kenneth B. Oster, ST5:May 76:961:12117

Cheng, Mow-Soung
See Thomas E. Croley, II, PO1:Jan 76:1:11829
See Thomas E. Croley, II, PO1:Jan 76:21:11828
See Thomas E. Croley, II, PO2:Nov 76:147:12515

Cheng, Ralph Ta-shun
A Numerical Model of the Time-Dependent, Three-Dimensional Structure of Circulation in Large Lakes, Preprint No.2692, Apr 76, 27pp.
Study of Fluid Movements through Causeway, with Min-Hsiung Hu, HY1:Jan 75:155:11076
TR:141:209

Cheng, Wun-Chau
Computer Analysis of Steel Frame in Fire, with Cary K. Mak, ST4:Apr 75:854:11262
TR:141:266

Chenoweth, R. B.
See J. R. Dunkelberg, CE:Aug 75:32

Cheong, H. F.
See Ananthakrishnan Sundar, EE1:Feb 75:179:11085

Cheong, Hin Fatt
Stochastic Characteristics of Sediment Motions, with Hsieh W. Shen, HY7:July 76:1035:12269

Cheong-Siat-Moy, Francois
Inelastic Sway Buckling of Multistory Frames, ST1:Jan 76:65:11848
Dsc: Oscar de Buen, ST12:Dec 76:2386:12588
Multistory Frame Design Using Story Stiffness Concept, ST6:June 76:1197:12221
Dsc, with K. Takanashi, ST6:June 75:1291:11342, of "Subassemblage Concept for Tall Frame Analysis", ST8:Aug 74:1611:10739
Dsc, ST6:June 75:1294:11342, of "Preliminary Plastic Design of Tall Steel Frames", ST9:Sept 74:1837:10796

Cherwony, Walter
Evaluation of Long-Range Transit Alternatives, with Lewis Polin, TE2:May 75:199:11282
TR:141:150
Two-Dimensional Logit Modal Split Model, with Jerome Lutin, TE3:Aug 76:525:12299

Chery, Donald L.
See Roger E. Smith, HY3:Mar 76:432:11950

Chesson, Eugene, Jr.
Dsc, CE:Mar 76:26, on Beam Deflections by Numerical Integration, CE:Dec 75:67
Dsc, ST9:Sept 76:1964:12366, of "Fatigue Life Extension of Riveted Connections", ST12:Dec 75:2591:11795

Chetty, Alvar T.
See Simon F. Ng, ST7:July 75:1419:11434

Chevray, Rene
Giuseppe Venturoli, Pioneer in Channel Studies, HY10:Oct 76:1533:12488

Cheyer, Thomas E.
Dsc, HY1:Jan 76:118:11817, of "Resistance to Flows in Alluvial Channels", HY6:June 75:665:11352

Chhun, V. Heang
See Walter H. Graf, IR4:Dec 76:413:12603

Chi, Michael
See Darrell A. Milburn, Preprint No.2713, Apr 76, 21pp.
See Darrell A. Milburn, ST11:Nov 76:2137:12535

Chian, Edward S.K.
Sanitary Landfill Leachates and Their Leachate Treatment, with Poppe B. DeWalle, EE2:Apr 76:411:12033
Dsc: Santosh R. Goswami and Ben C. Wester, EE6:Dec 76:1307:12583

Chiang, Cheng H.
Dsc, EE4:Aug 75:682:11467, of "Statistical Evaluation of Reaeration Prediction Equations", EE5:Oct 74:1051:10849
Dsc, EE4:Aug 76:875:12277, of "Design Graphs for Activated Sludge Process", EE5:Oct 75:829:11659
Dsc, EE5:Oct 76:1131:12436, of "Land Use and Water Quality in New York Rivers", EE1:Feb 76:1:11902

Chiang, Sie Ling
Low Flow Criteria for Diversions and Impoundments, with Fred W. Johnson, WR2:Nov 76:227:12553
Prediction of Flood Volume from Small Humid Region Watersheds, HY7:July 75:817:11466
TR:141:406
Dsc, HY6:June 75:784:11340, of "Optimal Design for Highway Drainage Culverts", HY7:July 74:971:10676

Chiarulli, Peter
Dsc, EI1:Jan 76:136, of "Unique Team Effort on Washington Subway Project", EI1:Jan 76:129:11872

Chien, Eddie Y.L.
Providing the Profession with Design Programs, with Michael I. Gilmor, EI2:Apr 75:165:11261
TR:141:318

Chien, Jong-Song
Synthetic Design Hyetograph and Rational Runoff Coefficient, with Simsek Sarikelle, IR3:Sept 76:307:12375
Urban Runoff by Linearized Subhydrographic Method, with Krishan K. Saigal, HY8:Aug 74:1141:10766
Dsc: Shih-Cheng Chang, HY4:Apr 75:435:11209; Arie Ben-Zvi, HY4:Apr 75:436:11209; Hung Tao Shen, HY7:July 75:1031:11399; Stuart G. Walesh, HY11:Nov 75:1447:11672
Clo: HY5:May 76:681:12092
TR:141:124
Dsc, EE3:June 75:461:11337, of "Volume of Storm Water Retention Basins", EE5:Oct 74:1165:10889
Dsc, EE2:Apr 76:497:12010, of "Infiltration-Inflow Analysis", EE5:Oct 75:775:11645

Chieng, Sie-tan
See Ashim K. Bhattacharya, Preprint No.2773, Sept 76, 18pp.

Childrey, Mitchell R.
See George K. Young, Jr., HY7:July 74:971:10676

Chin, Francis
Gate-Arrival Terminals—Solution for Air Cargo?, with Richard de Neufville and Jorge Rebelo, TE1: Feb 76:47:11890

Chin, Kee Kean
Dsc, with Ananthakrishnan Sundar, HY3:Mar 76: 426:11950, of "Analysis of Multiple Objectives in Water Quality", HY4:Apr 75:387:11234

Chisholm, Peter S.
The Hydrology of the Upper 12-in. (30-cm) of Well-Drained, Imperfectly Drained, and Poorly Drained Mineral Soil Profiles, with Robert W. Kirkness, IR76:July 76:193

Chisholm, W. Orville
See Hans J. Leutheusser, HY7:July 73:1027:9831

Chisman, James A.
See John W. Hyden, EE4:Aug 75:623:11524

Chitale, Shrikrishna V.
Shape and Size of Alluvial Canals, HY7:July 76:1003: 12260
Dsc, with Kadambi S. Rajagopalan, HY10:Oct 74: 1487:10839, of "Prediction of Mixing Lengths for River Flow Gaging", HY7:July 73:1069:9856
Dsc, with Vijaykumar K. Kulkarni, HY10:Oct 75: 1369:11600, of "Tests of Scour Protection for Bridge Piers", HY12:Dec 74:1773:11017
Dsc, HY1:Jan 76:98:11817, of "River Regime with Special Reference to River Nile", HY1:Jan 75:135: 11072

Chitnuyanondh, Larp
Shear Failure Due to Web Crushing in Prestressed Concrete I-Beams, with T. Ivan Campbell, Barrington deV. Batchelor and Paul Csagoly, T76: Aug 76:476

Chiu, Arthur N.L.
See George T. Taoka, ST2:Feb 74:305:10336

Chiu, Chao-Lin
Simulation of Hydraulic Processes in Open Channels, with Hsin-Chi Lin and Kazumasa Mizumura, HY2: Feb 76:185:11905

Chiu, Yishu
Boundary Layer Separation Concept of Settling Tanks, EE6:Dec 74:1213:11019
Dsc: Edward Silberman, EE4:Aug 75:685:11467; S. David Graber, EE5:Oct 75:866:11596; A. A. Sfeir, EE5:Oct 75:868:11596
Errata: EE1:Feb 76:216:11876
Clo: EE5:Oct 76:1121:12436
TR:141:187
Solid Waste Generation Rates of a University Community, with Joan Eyster and George W. Gipe, TN: EE6:Dec 76:1285:12638

Cho, Soung M.
See Ronald S. Kane, HY1:Jan 76:57:11873

Cho, W.
Dsc, SDNPF:Dec 73:III-106, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81

Cho, Y.
Saturated Sand and Cyclic Dynamic Tests, with Paul C. Rizzo and Wilfred K. Humphries, Preprint No.2752, Sept 76, 28pp.

Chockalingam, Sithambaram
See Paul P. Fazio, ST3:Mar 76:684:11952
See Paul P. Fazio, ST12:Dec 76:2400:12588

Choi, Chang-Koon
Nonconforming Finite Element Analysis of Shells, with William C. Schnobrich, EM4:Aug 75:447: 11504
TR:141:310

Chokshi, Nilesh C.
Maximum Response Statistics for Yielding Oscillator, with Loren D. Lutes, EM6:Dec 76:983:12632

Chong, Ken P.
Axial Compression of Formed-Faced Sandwich Panels, with Pei-Chung Liu and Kjell Oistein Engen, Preprint No.2807, Sept 76, 22pp.
Light-Gage Steel Bolted Connections without Washers, with Robert B. Matlock, ST7:July 75: 1381:11433
Dsc: Robert W. Haussler and Richard F. Pabers, ST12:Dec 76:2375:12588
TR:141:350
Literature Surveys of Cold-Formed Structures, Preprint No.2807, Sept 76, 59pp.
Optimization of Unstiffened Hybrid Beams, ST2:Feb 76:401:11907
Dsc: Narayanan Subramanian, ST12:Dec 76:2397: 12588
Shear Analysis of Tapered Beams, with William D. Swanson and Robert B. Matlock, ST9:Sept 76:1781: 12411
Dsc, ST3:Mar 75:619:11151, of "Post-Local-Buckling Behavior of Continuous Beams", ST6:June 74:1169: 10595
See John A. Hartsock, ST4:Apr 76:803:12058
See Bin Chang, ST7:July 76:1517:12226

Chopra, Anil K.
Dynamic Stiffness Matrices for Viscoelastic Half-Plane Foundations, with P. Chakrabarti and Gautam Dasgupta, EM3:June 76:497:12209
Earthquake Resistant Design of Intake-Outlet Towers, with C-Y. Liaw, ST7:July 75:1349:11422
Dsc: Peter W. Taylor and Warwick V. Clay, ST6: June 76:1266:12166
Clo: ST12:Dec 76:2373:12588
TR:141:335
See Ashok K. Vaish, EM6:Dec 74:1101:10990

Chou, Tsung-Lien
Dsc, CO1:Mar 75:227:11147, of "Basic Construction Principles in Higher Latitudes", CO1:Mar 74:33: 10399
The Yellow River: Its Unique Features and Serious Problems, WW76:Aug 76:507

Chou, Yu Tang
Response of Flexible Pavements to Multiple Loads, with Ronald L. Hutchinson and Harry H. Ulery, Jr., TE2:May 75:247:11307
TR:141:213
See Richard G. Ahlvin, TE3:Aug 74:625:10727

Choudhry, Wali Muhammad
See S. M. Ayoob, WW76:Aug 76:1071

Chowdhury, Robin N.
Flow at Interface of Two Anisotropic Soil Zones, TN: GT11:Nov 76:1195:12513
Initial Stresses in Natural Slope Analysis, GT76:Aug 76:404
Dsc, GT1:Jan 75:76:11037, of "Yielding of Sand in Plane Strain", GT5:May 74:491:10540
Dsc, GT8:Aug 75:831:11469, of "Shearing Strength of Kaolinite, Illite, and Montmorillonite", GT11: Nov 74:1215:10947

Chriss, Stephen
Frame Interaction in Nonorthogonal Grids, ST4:Apr 76:739:12031

Christensen, Bent A.
Hydraulics of Sheet Flow in Wetlands, WW76:Aug 76:746
Mild Slope Stable Channels — A Stochastic Design Approach, Preprint No.2680, Apr 76, 14pp.

See Ashish J. Mehta, WW76:Aug 76:960
See Ho-Shong Hou, WW76:Aug 76:1179

Christensen, D. R.
See Colin B. Brown, ST76:Aug 76:189

Christensen, Martin
See Zdenek P. Bazant, ST6:June 76:1285:12166

Christian, Howard E.
See A. D. Berryman, WW76:Aug 76:1350

Christian, John T.
Analysis of Offshore Concrete Caisson Dikes under Cyclic Loading, with Jean M.E. Audibert, NMG: June 76:II-979
Consolidation with Internal Pressure Generation, TN: GT10:Oct 76:1111:12445
Relative Motion of Two Points during an Earthquake, TN: GT11:Nov 76:1191:12513
A Standard for Computer Program Distribution, GT10:Oct 76:1049:12472
Statistics of Liquefaction and SPT Results, with William F. Swiger, GT11:Nov 75:1135:11701
Dsc: Robert G. Easterling and Lyman W. Heller, GT10:Oct 76:1126:12439; Elias Zolkov, GT10: Oct 76:1128:12439
Clo: GT12:Dec 76:1279:12585
TR:141:500
Uncertainties in Soil Structure Interaction, STN75: Dec 75:II-105
Dsc, STN75:Dec 75:II-271, of "Consideration of Finite Element Representation", STN75:Dec 75:II-246
See Rebecca Grant, GT9:Sept 74:973:10802
See David S. Campbell, GT76:Aug 76:415
See Gonzalo Castro Salas, GT9:Sept 76:887:12387
See Eduardo Kausel, GT11:Nov 76:1159:12579

Christiano, Paul P.
See Gordon R. Johnson, GT8:Aug 75:789:11522
See Dharapuram S. Jagannathan, ST12:Dec 75:2641: 11799

Christiansen, H. N.
Computer Graphics, Treatment for the Terminal Illness, Preprint No.2765, Sept 76, 20pp.

Christiansen, Jerald E.
Dsc, IR2:June 75:117:11341, of "Water Management Through Irrigation and Drainage: Progress, Problems, and Opportunities", IR2:June 74:153: 10619
Dsc, IR2:June 75:125:11341, of "Irrigation Management for Salt Control", IR3:Sept 74:321: 10822
1976 Royce J. Tipton Award Presented to Jerald E. Christiansen, CE:Oct 76:103

Christie, Richard W.
See Egbert R. Hardesty, CO3:Sept 75:511:11565
See Egbert R. Hardesty, CO3:Sept 75:529:11594

Christofferson, John R.
Dsc, EI3: 07:397:12223, of "Trends in P.E. License Renewal Requirements", EI4:Oct 75:449: 11667
Dsc, CO1:Mar 75:231:11147, of "New Methods in Construction Systems", CO3:Sept 74:211:10788
Dsc, HY9:Sept 75:1297:11535, of "Monetary Values of Life and Health", HY1:Jan 75:29:11047
Dsc, IR3:Sept 75:234:11536, of "Weather Modification for Use in High Plains", IR3:Sept 74: 339:10816

Chu, Hsiao-Ling
Time-Reversed Unsteady Flow Computations in Waterways, WW76:Aug 76:1535
See Michael Amein, HY6:June 75:717:11378

Chu, Kuang-Han
Effective Column Length in Polygon Shaped Frames, with Robert H. Rampetsreiter, TN: ST8:Aug 76: 1629:12288
Nonlinear Cable and Frame Interaction, with David Chia-Chiun Ma, ST3:Mar 76:569:12008
Dsc, ST1:Jan 75:359:11039, of "Irregular Supports and Skew Diaphragms of Box Girders", ST5:May 74:917:10541
Dsc, EM1:Feb 75:81:11086, of "Inelastic Buckling of Rings with Residual Stresses", EM5:Oct 73:927: 10063
Dsc, ST7:July 76:1530:12226, of "Nonlinear Analysis of Reticulated Space Trusses", ST12:Dec 75:2641: 11799

Chu, Shih-Lung
Dsc, SDNPF:Dec 73:III-50, of "Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities", SDNPF:Dec 73:III-19
Dsc, SDNPF:Dec 73:III-105, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81
See E. D'Appolonia, SDNPF:Dec 73:III-19
See Hemant H. Shah, PO1:July 74:53:10648
See Edwin C. Rossow, ST4:Apr 75:839:11257

Chu, Vincent H.
Buoyant Forced-Plumes in Cross Flow, with Michael B. Goldberg, HY9:Sept 74:1203:10805
Dsc: Daniel T.-L. Chan and John F. Kennedy, HY8:Aug 75:1105:11470
TR:141:126
Experimental Study of Turbulent Stratified Shearing Flow, with Madanlal R. Vanvari, HY6:June 76:691: 12205

Chu, Yishu
Biosorption Isotherm for Uranium Recovery, with James E. Zajic, TN: EE5:Oct 76:1109:12442

Chugh, Ashok K.
Analysis of Multilayer Plates on Elastic Pillars, with Hans Gesund and Fred D. Wright, ST11:Nov 75: 2405:11738
TR:141:488
Dsc, ST1:Jan 76:307:11819, of "Ultimate Live Load Distribution Factor for Bridges", ST7:July 75:1481: 11443

Chung, Yong Kwun
Hydrodynamic Forces and Moments for Oscillating Cylinders, with Martha I. Coleman, OE75:June 75: 899
Tornado-Induced Waves in a Basin, with Herman Bomze, OE75:June 75:96

Church, Michael
See Rolf Kellerhals, HY1:Jan 76:115:11817
See Rolf Kellerhals, HY7:July 76:813:12232

Churchill, Stuart W.
See Jai P. Gupta, TN: GT2:Feb 76:185:11885

Cin, Dennis E.
See William R. Pearson, WW76:Aug 76:536

Claessen, Alphonsus I. M.
Reducing Negative Friction with Bitumen Slip Layers, with Endre Horvat, GT8:Aug 74:925:10764
Dsc: Bengt H. Fellenius, GT4:Apr 75:412:11208; Carl Redel, GT7:July 75:11398
Clo: GT3:Mar 76:255:11949
TR:141:111

Clark, C. O.
Dsc, HY8:Aug 75:1110:11470, of "Simple Nonlinear Model for Flood Estimation", HY11:Nov 74:1507: 10933

Clark, C. Scott
Disease Risks of Occupational Exposure to Sewage, with Edward J. Cleary, Gilbert M. Schiff, Clavin C. Linneman, Jr., John P. Phair and Terrence M. Briggs, EE2:Apr 76:375:12038
Dsc: Ronald F. Layton, EE5:Oct 76:1134:12436; Joe O. Ledbetter, EE6:Dec 76:1310:12583; R. Pavanello, EE6:Dec 76:1311:12583

Clark, Dayle M.
Competition in the Transportation Industry, with James J. Schwarzwalder, TE3:Aug 76:489:12290

Clark, James
See Jerry B. Schneider, TE4:Nov 74:943:10936

Clark, John
See James C. North, DIEE:Jan 76:593

Clark, Joseph A.
Flow Visualization in Free Shear Layers, with Eric Markland, HY11:Nov 73:1897:10119
Errata: HY6:June 74:832:10567
Clo: HY1:Jan 76:91:11817
TR:141:23

Clark, P. J.
See P. A. Cox, WW76:Aug 76:852

Clark, Richard E.
See Altay Cataloglu, EM1:Feb 76:135:11924

Clark, Robert M.
Cost and Pricing Relationships in Water Supply, EE2:Apr 76:361:12025
Systems Analysis and Solid Waste Planning, with James I. Gillean, EE1:Feb 74:7.10316
Dsc: Marlin U. Thomas, EE6:Dec 74:1290:10971
Clo: EE4:Aug 75:666:11467
TR:141:42
Water Supply Economics, UP1:Aug 76:213:12357

Clark, Samuel H.
California Coastal Commission Accepts Advice from ASCE on Earthquake Design Controversy, CE:May 76:85

Clarke, William G.
See Jiri Marsalek, HY8:Aug 75:1101:11470

Clarkson, John A.
See Lewis C. Schmidt, ST7:July 76:1479:12274

Clary, Adrian G.
Dsc, Energy Saving Addition, CE:Sept 76:30

Clay, Lucius D.
Gen. Clay is First Recipient of President's Award, CE:Oct 76:96

Clay, Warwick V.
See Peter W. Taylor, ST6:June 76:1266:12166

Cleary, Edward J.
See C. Scott Clark, EE2:Apr 76:375:12038

Cleasby, John L.
Developments in Backwashing of Granular Filters, with Edward W. Stangl and Gary A. Rice, EE5:Oct 75:713:11642
TR:141:454
Effect of Media Intermixing on Dual Media Filtration, with Gary D. Sejkora, EE4:Aug 75:503:11528
Dsc: J. G. McNaughton, EE4:Aug 76:864:12277
TR:141:384

Clemence, Samuel P.
Large-Scale Model Test of Drilled Pier in Sand, with William F. Brumund, GT6:June 75:537:11369
TR:141:328
See Van A. Silver, GT76:Aug 76:13

Clingan, Thomas A., Jr.
The Oceans and American Policy, OE75:June 75:1490

Clisby, M. Barrett
See T. C. Paul Teng, TE1:Feb 75:77:11105

Close, Ross A.
Dsc, EM4:Aug 75:495:11468, of "Theoretical Analysis of Curved Girder Bridges", EM5:Oct 74:991:10871

Clough, G. Wayne
Lessons Learned in Finite Element Analyses of Temporary Excavations in Soft Clay, with Abdulaziz I. Mana, NMG:June 76:I-496
Performance of Tied-Back Walls in Clay, with Yuet Tsui, GT12:Dec 74:1259:11028
Dsc: Dieter Stroh, GT8:Aug 75:833:11469
Clo: GT1:Jan 76:112:11816
TR:141:162
See Donald J. Murphy, GT3:Mar 75:279:11179
See Jean M.E. Audibert, NMG:June 76:I-567

Cluff, C. Brent
See Ronald K. Frobel, IR3:Sept 76:369:12430

Cobb, Gary D.
Evolving National Water Policies, EI3:July 75:375:11427
Errata: EI3:July 76:397:12223
TR:141:413
Project Formulation: Economic and Financial Aspects, IR76:July 76:660

Cockburn, Robert T.
See William R. Giessner, EE4:Aug 74:1013:10744
See William R. Giessner, CE:Oct 76:101

Coffee, Harold C., Jr.
Dsc, HY3:Mar 76:442:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445

Cogley, David R.
Laboratory Study of the Turbidity Generation Potential of Clay Mixtures, with Barry A. Wechsler and Ralph D'Agostino, DIEE:Jan 76:964

Cohn, M. Z.
Collapse Load Analysis of Frames Considering Axial Forces, with Tariq Rafay, EM4:Aug 74:773:10757
Errata: EM4:Aug 75:493:11468
TR:141:82

Colby, James E.
Dsc, CE:May 76:32, on Protection of Piles: Steel, Concrete, Wood, CE:Dec 75:59

Cole, John A.
Dsc, HY8:Aug 74:1167:10696, of "Prediction of Mixing Lengths for River Flow Gaging", HY7:July 73:1069:9856

Cole, Peter P.
Buckling of Cooling-Tower Shells: Bifurcation Results, with John F. Abel and David P. Billington, ST6:June 75:1205:11365
Dsc: Heinrich Stallbohm, Ihsan Mungan and Phillip L. Gould, ASCE1:Jan 76:303:11819
TR:141:309
Buckling of Cooling-Tower Shells: State-of-the-Art, with John F. Abel and David P. Billington, ST6:June 75:1185:11364
Dsc: Chang-hua Yeh and William Y.J. Shieh, ST1:Jan 76:301:11819; Ihsan Mungan, ST1:Jan 76:302:11819
TR:141:305

Coleman, C. S.
See Eugene E. Dallaire, CE:Sept 76:77

Coleman, Martha I.
See Yong Kwun Chung, OE75:June 75:899

Collings, Andrew G.
Analysis of Some Double Layer Grids, ST8:Aug 76:1591:12342

Collins, Dannie L.
Discharge Computations at River Control Structures, HY7:July 76:845:12237

Collins, Harvey F.
Sewage Chlorination Versus Toxicity -- A Dilemma?, with David G. Deaner, EE6:Dec 73:761:10190
Dsc: Veerasamy Kothandaraman and Ralph L. Evans, EE3:June 74:785:10564; Shundar Lin, EE3:June 74:786:10564; George C. White, EE5: Oct 74:1188:10836; Shankha K. Banerji and C. Michael Robson, EE6:Dec 74:1283:10971; David H. Stoltenberg, EE6:Dec 74:1285:10971
Clo: EE4:Aug 75:661:11467
TR:141:10

Collins, Jon D.
Structural System Failure Analysis in a High Load Environment, ST76:Aug 76:39
See Larry T. Lee, Preprint No.2757, Sept 76, 30pp.

Collins, Michael A.
Dsc, HY11:Nov 76:1707:12508, of "Explicit Equations for Pipe-Flow Problems", HY5:May 76: 657:12146
Dsc, HY12:Dec 76:1791:12586, of "Transient Dispersion in Uniform Media Flow", HY6:June 76: 707:12202
See Lynn W. Gelhar, EM5:Oct 75:718:11598

Colony, David C.
Modeling Social Impacts of Urban Highways, with Abul B. Shah Alam, TE2:May 76:395:12148

Colony, Roger
See Robert S. Pritchard, NMG:June 76:II-1194
See Max D. Coon, NMG:June 76:II-1210

Colvocoresses, Alden P.
Dsc, SU1:Dec 76:100:12589, of "Critical Areas for Research in Oceanographic and Hydrographic Surveying and Charting", SU1:Oct 75:43:11627
Dsc, SU1:Dec 76:100:12589, of "Marine Geodesy — Precise Ocean Surveys", SU1:Oct 75:73:11631

Combe, Adrian J., III
Response of Carolina Beach Inlet to a Deposition Basin Dredged in the Throat, with George M. Watts, DIEE:Jan 76:719

Combs, Phil G.
Hydraulic Modeling Techniques in a Backwater Area, with Nolan K. Raphelt and James E. Foster, WW76:Aug 76:232

Congleton, James L.
Simple Flume for Guidance and Impingement Studies, with Ronald D. Mayo, PO1:July 75:35: 11416
TR:141:487

Connally, Ernest Allen
Historic Preservation and the Role of the Civil Engineer, Preprint No.2744, Sept 76, 11pp.

Connell, Francis J.
Francis J. Connell Takes Office in Philadelphia, CE: Oct 76:93

Connor, Desmond M.
Citizen Inputs to Public Works Projects, EI1:Jan 76: 29:11856
Citizen Participation: Assessing Public Attitudes, CE: Oct 75:78
TR:141:421

Contractor, Dinshaw N.
Dsc, EM5:Oct 74:1059:10837, of "Open-Channel Flow Equations Revisited", EM5:Oct 73:979:10073
See J. H. Amend, NMG:June 76:II-1155
See V. Seetharama Rao, WW76:Aug 76:421

Contro, Roberto
See Giulio Maier, EM5:Oct 75:531:11614

Conwell, William A.
William A. Conwell Elected to Honorary Membership, CE:Oct 76:94

Cook, James R.
Nebraska Flood-Plain Management Program—Part II, HY7:July 75:983:11438
TR:141:363

Cook, John P.
Composite Construction Methods, CO1:Mar 76:21: 11975
A History of Joints in Concrete Pavements, CO1: Mar 75:29:11201
Dsc: Gordon K. Ray, CO4:Dec 75:941:11740
TR:141:242

Cook, Robert D.
Avoidance of Parasitic Shear in Plane Element, ST6: June 75:1239:11370
TR:141:311
Improved Two-Dimensional Finite Element, ST9:Sept 74:1851:10808
Errata: ST7:July 75:1622:11401
TR:141:93
Review of Selected Topics in Finite Element Analysis, ST76:Aug 76:535

Cooke, John Fothergill
Dsc, IR4:Dec 74:518:10975, of "Irrigation Development in Bangladesh", IR1:Mar 74:69:10394

Cooke, Nigel
See Bruce W. Hunt, ST9:Sept 75:1763:11545

Cooley, Keith R.
Evaporation Reduction with Reflective Covers, with Lloyd E. Myers, IR3:Sept 73:353:9982
Dsc: A. F. Thoma, IR3:Sept 74:397:10771
Clo: IR3:Sept 75:224:11536
TR:141:40

Cooley, Richard L.
Finite Element Solution of Saint-Venant Equations, with Syed Afaq Moin, HY6:June 76:759:12213

Coon, Max D.
Calculations to Test a Pack Ice Model, with Roger Colony, Robert S. Pritchard and D. A. Rothrock, NMG:June 76:II-1210

Cooper, Alfred J.
Integrated River System Operation in a Major Flood, with Clifford A. Roberts, PO1:Jan 76:63:11825
Dsc: James D. Calvert, Jr., PO2:Nov 76:232: 12509

Cooper, Hal B.H., Jr.
Air Pollution Impact of Railroad Electrification, with Hoy A. Richards and Aaron T.B. Lam, EE4:Aug 76:723:12312

Cooper, K. R.
Aerodynamic Investigations of In-Line Slender Towers for Heavy Water Plants, with H. P.A.H. Irwin and R. L. Wardlaw, ST76:Aug 76:286

Cooper, Larry A.
Dsc, CE:Sept 75:38, on Protecting Your Firm against Liability Claims, CE:June 75:66

Cooper, Peter B.
See Tsong-Miin Wang, ST9:Sept 75:1783:11540

Cooper, Robert C.
Health Considerations in Use of Tertiary Effluents, Preprint No.2723, Apr 76, 18pp.

Cooper, Sol E.
The Engineering and Minority Community in Symbiosis, EI2:Apr 76:217:12078

Cooper-Ruska, Catherine
See Peter M. Ashton, WR1:Apr 76:89:12084

Cope, Robert J.
Examples of Computer Usage in Bridge Design, with John H. Bungey, ST4:Apr 75:779:11230
TR:141:242

Copeland, B. J.
Marine Ecological Impacts Associated with Power Plant Activities, with Frank N. Moseley, EFEEC: Aug 75:250

Corapcioglu, M. Yavuz
See Wilfried Brutsaert, HY11:Nov 76:1663:12541

Coray, Kevin E.
Summary for Session II - Human Factors Affecting the Constructed Environment, with Ronald W. Petersen, EFAN:Dec 74:249
See Wayne D. Veneklasen, EFAN:Dec 74:127

Cordery, Ian
See David H. Pilgrim, HY1:Jan 75:81:11057

Cordes, Martin R.
See James F. Costello, Preprint No.2739, Sept 76, 29pp.

Cording, Edward J.
See William H. Hansmire, GT3:Mar 76:259:11949

Cordoba-Molina, J. F.
See P. L. Silveston, EE4:Aug 75:672:11467

Cornell, C. Allin
Seismic Risk Analysis of Boston, with Hans A. Merz, ST10:Oct 75:2027:11617
Errata: ST4:Apr 76:866:12015
TR:141:430
See Robert V. Whitman, ST5:May 75:1067:11309
See Robert C. Garson, ST9:Sept 75:1883:11559
See J. Morla Catalan, GT6:June 76:591:12214

Corns, Charles F.
The National Dam Inspection Program, CE:Apr 75: 75
Dsc: Russell W. Revell, CE:July 75:38
TR:141:169
National Program of Inspection of Dams — Existing Practices and Capabilities, EFRLD:Sept 75:17

Corotis, Ross B.
Stochastic Analysis of Floor Loads, with Viresh A. Doshi, ST76:Aug 76:72
Stochastic Considerations in Thunderstorm Modeling, HY7:July 76:865:12231
Time-Dependent Spectral Content of System Response, with Erik H. Vanmarcke, EM5:Oct 75: 623:11648
TR:141:415
See Michael J. O'Rourke, ST12:Dec 75:2557:11786
See Raymond J. Krizek, ST76:Aug 76:607

Corradi, Leone
Inelastic Analysis of Reinforced Concrete Frames, with Osvaldo De Donato and Giulio Maier, ST9: Sept 74:1925:10832
Errata: ST7:July 75:1622:11401
TR:141:96

Corradino, Joseph C.
Synthesizing Taxicab Improvements, TE4:Nov 76: 793:12545
See John J. Jarvis, UP1:Aug 76:187:12353

Cortes-Comerer, Nhora I.
William D. Henderson: Man, Engineer, Priest Minister, CE:Mar 76:63
Dsc: K. Ronald Chapman, CE:May 76:32; Robert A. Rubin, CE:May 76:32; Darrell J. Turner, CE: May 76:32
TR:141:517

Cossette, Claude
Maintenance of Services during Construction, with Ernest Zbinden, CO1:Mar 75:155:11186
TR:141:196

Costantino, Carl J.
Session 6: Soil Structure Interaction — Wave Propagation, STN75:Dec 75:II-203
Dsc, SDNPF:Dec 73:III-49, of "Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities", SDNPF:Dec 73:III-19
See E. D'Appolonia, SDNPF:Dec 73:III-19

Costello, George A.
Effective Modulus of Twisted Wire Cables, with James W. Phillips, EM1:Feb 76:171:11944
Dsc: Hassan I.A. Hegab, EM6:Dec 76:1097:12584

Costello, James F.
Drag Forces on Tornado Borne Missiles, with Willy Z. Sadeh, STN75:Dec 75:II-21
Tornado-Borne Missile Speeds, with Emil Simiu and Martin R. Cordes, Preprint No.2739, Sept 76, 29pp.
Dsc, PO2:Nov 76:227:12509, of "Statistical Aspects of Containment Tendon Surveillance", PO1:July 75: 23:11406

Cotter, Dennis C.
See Subrata K. Chakrabarti, WW3:Aug 75:303:11473

Cotton, Willard J.
Dsc, with Thomas L. Rutherford, HY10:Oct 75:1371: 11600, of "Rainfall Temporal Patterns for Design Floods", HY1:Jan 75:81:11057

Coull, Alexander
Simplified Analysis of Framed-Tube Structures, with Bishwanath Bose, ST11:Nov 75:2223:11696
Dsc: Zdenek P. Bazant and Martin Christensen, ST6:June 76:1285:12166
TR:141:456
Torsion of Frame-Tube Structures, with Bishwanath Bose, TN: ST12:Dec 76:2366:12593
See Kumarapillai K. Nayar, ST9:Sept 76:1845:12401

Coulthard, T. L.
See Okay Cyril Igwe, IR76:July 76:519

Coumoulos, John D.
Dsc, GT7:July 76:815:12224, of "Statistical Quality Control at Kastraki Earth Dam", GT9:Sept 75:837: 11552

Courtney, John M.
Developing Alternative Futures, UP1:Aug 76:49: 12337

Courtois, Peter D.
Dsc, CO4:Dec 74:655:10970, of "Bridge Construction Surveying", CO2:June 74:105:10602

Cowley, James E.
A Model Study of St. Marys River Ice Navigation, with J. W. Hayden and William W. Willis, WW76: Aug 76:1610

Cox, Geraldine V.
Environmental Baseline Study on the Continental Shelf off the New York Bight, Preprint No.2655, Apr 76, 20pp.
Monitoring Sludge Disposal — Mid-Atlantic Shelf, with Steven A. Townsend and Priya Wickramarante, OE75:June 75:1314

Cox, John B.
Dsc, GT11:Nov 75:1173:11674, of "Embankment on Soft and Sensitive Clay Foundation", GT3:Mar 75: 297:11193

Cox, Mildred
Reserved Bus Lanes in Dallas, Texas, TE4:Nov 75: 691:11720
TR:141:427

Cox, P. A.
Thames Barrier Project, with P. J. Clark and G. Miller-Richards, WW76:Aug 76:852

Cox, Walter G.
Lead Analysis in Dredge Spoil Elutriates, DIEE:Jan 76:242

Cox, William E.
Development Versus Preservation: Legal Accommodation, with William R. Walker, WW76:Aug 76:161
See William R. Walker, HY11:Nov 74:1699:10958
See William R. Walker, HY3:Mar 75:511:11156
See William R. Walker, HY10:Oct 75:1333:11665
See William R. Walker, UP1:Aug 76:81:12339

Coy, L. Bennett
The Miami Conservancy District — A Study in Self Help, Preprint No.2747, Sept 76, 11pp.

Coyle, Harry M.
Earth Pressure on Precast Panel Retaining Wall, with Richard E. Bartoskewitz, GT5:May 76:441:12113
See Ibrahim H. Sulaiman, TN: GT5:May 76:559:12127

Crandall, Keith C.
Probabilistic Time Scheduling, CO3:Sept 76:415:12398

Crandall, Paul S.
Floating Dry Dock Doubles as Launching Platform, CE:May 75:74
Dsc: Ralph H. Kratz, CE:June 76:36
Errata: CE:July 75:36
TR:141:221

Crawford, Herbert R.
Lake Erie Airport Study — A Status Report, Preprint No.2635, Apr 76, 27pp.

Crawford, John E.
See Raman Pichumani, TE2:May 74:293:10516

Crawford, Norman H.
See Anthony S. Donigian, Jr., Preprint No.2670, Apr 76, 27pp.

Crawford, Thomas H.
Class I Bikeway Geometrics, BP75:Dec 75:308
A Survey of Class I Bikeway Pavements, with R. Gary Hicks, James J. Berryhill and James S. Lai, BP75:Dec 75:278

Crew, Henry
Dense Effluent Dispersion in a Stream, with Robert O. Reid, EM1:Feb 76:77:11915
Dsc: Subhash C. Mehrotra, EM5:Oct 76:941:12438

Crickmore, M. J.
See G. H. Lean, HY4:Apr 75:429:11209

Croley, Thomas E., II
Dry-Wet Tower Evaporation and Fog Psychometrics, with V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:21:11828
Economics of Dry-Wet Cooling Towers, with V. C. Patel and Mow-Soung Cheng, PO2:Nov 76:147:12515
Sequential Deterministic Optimization in Reservoir Operation, HY3:Mar 74:443:10426
Dsc: Ananthakrishnan Sundar and Hiroshi Matsuo, HY3:Mar 75:554:11148
Clo: HY9:Sept 75:1275:11535
TR:141:48
Thermodynamic Models of Dry-Wet Cooling Towers, with V. C. Patel and Mow-Soung Cheng, PO1:Jan 76:1:11829

Croll, James G.A.
Model of Interactive Buckling of Stiffened Plates, EM5:Oct 75:575:11622
TR:141:407

Cron, Robert E., Jr.
Opening Remarks — Pedestrian/Bicycle Facilities, BP75:Dec 75:1

Croneberger, Don K.
See Chang Chen, PO2:Nov 73:429:10111

Crooker, James O.
See Richard T. Douty, ST11:Nov 74:2275:10952

Crooks, Thomas J.
See Warren Jamison, IR76:July 76:532

Crookshank, Norman L.
See David Prandle, HY4:Apr 74:517:10472

Csagoly, Paul
See Larp Chitnuyanondh, T76:Aug 76:476
See Barrington deV. Batchelor, ST9:Sept 76:1789:12417

Cubaud, J. C.
See J. F. Jullien, EM5:Oct 76:867:12486

Culham, William B.
Dsc, CO2:June 75:451:11336, of "Construction Solid Waste", CO4:Dec 74:501:10993

Cullen, Andrew J.
See Dale I. Bray, WW76:Aug 76:1399

Culver, Charles G.
Live-Load Survey Results for Office Buildings, ST12:Dec 76:2269:12615
Steel Box-Girder Bridges—Ultimate Strength Considerations, ST12:Dec 74:2433:11014
Dsc: Max A.M. Herzog, ST8:Aug 75:1723:11471; Sanivarapu V. Narasimham, ST11:Nov 75:2441:11675
Clo: ST4:Apr 76:861:12015
TR:141:131
See Tasnim Uddin, ST7:July 75:1531:11440

Cundall, Peter
Explicit Finite-Difference Methods in Geomechanics, NMG:June 76:I-132

Cunge, Jean A.
Dsc, with James A. Liggett, HY4:Apr 75:431:11209, of "Comparison of Four Numerical Methods for Flood Routing", HY7:July 74:879:10659
Dsc, HY1:Jan 76:120:11817, of "Implicit Numerical Modeling of Unsteady Flows", HY6:June 75:717:11378

Cunny, Robert W.
Vibratory In Situ and Laboratory Soil Moduli Compared, with Zelma B. Fry, SM12:Dec 73:1055:10219
Dsc: Donald G. Anderson and Richard D. Woods, GT11:Nov 74:1254:10897; H. Turan Durgunoglu and Semih S. Tezcan, GT12:Dec 74:1303:10973
Clo: GT7:July 75:691:11398
TR:141:528
See George R. Skoglund, GT11:Nov 76:1147:12567

Cuoco, Daniel A.
See Lev Zetlin, ST11:Nov 75:2241:11711

Cuomo, Frank A.
Dsc, CE:July 76:30, on New Gravity/Pressure Unit Cuts Sludge Dewatering Costs, CE:Jan 76:69

Curi, Kriton
Dsc, EE6:Dec 74:1292:10971, of "Environmental Design for Istanbul Sewage Disposal", EE1:Feb 74:101:10343

Curran, John W.
See Robert M. Koerner, GT7:July 76:761:12239

Curtis, David C.
Economic Analysis of Residential Land-Use Alternatives, with Richard H. McCuen, UP2:Nov 75:109:11678
TR:141:337

Curtis, Kenneth S.
1976 Surveying and Mapping Award Presented to Kenneth S. Curtis, CE:Oct 76:104

Cusens, Anthony R.
Dsc, ST11:Nov 75:2449:11675, of "Coefficients to Analyze Rectangular Slab Bridges", ST1:Jan 75:151:11048
Dsc, with Khaled O. Ihsanullah, ST5:May 76:1170:12093, of "Study of Three-Flight Free-Standing Staircases", ST7:July 75:1419:11434

Cushing, Jerome J.
Curved Diaphragm Cellular Cofferdams, with Robert M. Moline, GT10:Oct 75:1055:11669
TR:141:477

Czarnecki, R. Martin
Procedures for Evaluation of Earthquake Risk to Buildings, with E. C. Wang and Sigmund A. Freeman, Preprint No.2804, Sept 76, 28pp.

Da Costa, Pedro C. C.
Dsc, HY11:Nov 75:1458:11672, of "Effects of Urbanization on Catchment Response", HY3:Mar 75:451:11196

da Cunha, L. Veiga
Dsc, HY11:Nov 75:1454:11672, of "Tests of Scour Protection for Bridge Piers", HY12:Dec 74:1773:11017

Daddario, Emilio Q.
OTA: Mixing Technology and National Goals, CE:Dec 75:78
Dsc: Robert F. Baker, CE:Feb 76:28
TR:141:501

Daecher, Carmen W.
A Guide for Municipalities for Bicycle Planning, BP75:Dec 75:117

Daggett, Larry L.
Similitude in Free-Surface Vortex Formations, with Garbis H. Keulegan, HY11:Nov 74:1565:10941
Dsc: Roger L. Hughes, HY9:Sept 75:1287:11535; James A. Weller, HY11:Nov 75:1449:11672; Akalank K. Jain and Kittur G. RangaRaju, HY11:Nov 75:1451:11672
TR:141:155

D'Agostino, Ralph
See David R. Cogley, DIEE:Jan 76:964

Dahlin, Ronald A.
180-Ft. x 1000-Ft. Shipbuilding Dock for National Steel and Shipbuilding Company, Preprint No.2671, Apr 76, 15pp.

Dahl-Jorgensen, Einar
Polymer-Impregnated Concrete: Laboratory Studies, with Wai F. Chen, John A. Manson, Yu-Nan Liu and John W. Vanderhoff, TE1:Feb 75:29:11101
TR:141:119

Dahlstrand, Timothy K.
Embankment Loading of Hydraulic Fill, Preprint No.2649, Apr 76, 14pp.

Daigger, Glen T.
See Ralph E. Roper, Jr., EE4:Aug 74:1048:10693

Dailey, James E.
See E. Douglas Sethness, Jr., OE75:June 75:677

Dajani, Jarir S.
Delphic Predictions and Cross Impact Simulation, with Gorman Gilbert, UP1:May 75:49:11316
TR:141:250
See Gorman Gilbert, EI1:Jan 75:15:11068

Dakshanamurthy, Varadharaja
Dsc, with Venkataraman Raman, GT6:June 75:588:11339, of "Review of Expansive Soils", GT6:June 74:667:10609

Dallaire, Eugene E.
Consultants Reviewing Plans of Other Consultants in Fairfax County, Va.; Landslides Greatly Reduced, with C. S. Coleman, CE:Sept 76:77
Controlling Runoff from Construction Sites, CE:Oct 76:73
The CRT Computer-Graphics Terminal: Indispensible Design-Aid for Some Structural Engineers, CE:Feb 76:47
Desperate Need to Slash Construction Cost of New Subways, CE:Dec 76:37
Filter Fabrics: Growing Use in Road and Highway Construction, CE:May 76:61
Errata: CE:Dec 76:28
The Floating Cover: Best Way to Cover a Finished-Water Reservoir?, CE:June 75:75
Dsc: T. J. Duke, CE:Oct 75:35
TR:141:264
Improving Your Writing, CE:Jan 75:60
Dsc: Raymond E. Knell, CE:Apr 75:20; Robert W. Driver, CE:Apr 75:22; Frank C. Moffett, CE:Apr 75:22; Paul F. Ruff, CE:May 75:24; Denis M. O'Malley, CE:July 75:36
TR:141:15
Improving Your Writing — Part II, CE:Apr 75:80
TR:141:174
New Gravity/Pressure Unit Cuts Sludge Dewatering Costs, CE:Jan 76:69
Dsc: Frank A. Cuomo, CE:July 76:30
PL 92-500 to Cost Metal Finishing Industry $45 Billion, CE:Sept 76:84
Pocket Calculators Take Hold in Civil Engineering, CE:Feb 75:39
Dsc: Charles R. Way, CE:May 75:21
TR:141:44
The Story of America's Transportation Revolution, CE:July 76:70
Dsc: L. S. Schmidt, CE:Nov 76:36
Tough Pollution Laws Spur Use of Impermeable Liners, CE:May 75:63
Dsc: Vaughn Marker, CE:Sept 75:31
TR:141:208
US Water Cleanup Program Speeds Up—But Still Much Red Tape, CE:Aug 75:71
Dsc: Jim Wright, CE:Nov 75:32; Russell E. Train, CE:Dec 75:40
TR:141:331
Will Industry Meet Water-Quality Goals?, CE:Dec 75:68
TR:141:494

Dalrymple, Robert A.
Wave-Induced Mass Transport in Water Waves, WW2:May 76:255:12158
Waves and Wave Forces in the Presence of Currents, OE75:June 75:999
Waves of Maximum Height on Uniform Currents, with Robert G. Dean, WW3:Aug 75:259:11509
Dsc: Panchapagesa Natarajan, WW3:Aug 76:358.12284
TR:141:393

Daly, Elton F.
See Michael G. Foley, TN: HY1:Jan 76:136:11820

Dames, Thomas A.
See William L. Grecco, EI4:Oct 75:485:11663

Dames, Trent R.
Trent R. Dames Elected to Honorary Membership, CE:Oct 76:94

Damianos, Demetrios I.
See Leonard A. Shabman, WR1:Apr 76:151:12065

Danay, Ari
Continuum Method for Overall Stability of Tall Asymmetric Buildings, with Menachem Gellert and Jacob Gluck, ST12:Dec 75:2505:11761
TR:141:494

D'Andrea, Robert A.
Dsc, GT1:Jan 75:74:11037, of "Probabilistic Analysis and Design of a Retained Wall", GT3:Mar 74:349:10436

d'Angremond, Kees
See Jaap de Nekker, DIEE:Jan 76:866

Daniel, Arthur W.T.
See Roger C. Harvey, GT6:June 76:662:12163

Daniel, David E.
Stress-Strain Properties of Compacted Clays, with Roy E. Olson, GT10:Oct 74:1123:10869
Dsc: Fred H. Kulhawy and James L. Withiam, GT7:July 75:702:11398
Clo: GT4:Apr 76:375:12013
TR:141:150

D'Appolonia, E.
Finite Element Analyses of Arch Abutments, with Donald E. Shaw, Jacques Richard and Daniel A. Raynaud, GT76:Aug 76:55
Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities, with H. Bolton Seed, Robert V. Whitman, Shih-Lung Chu, Carl J. Costantino, Asadour H. Hadjian, Izzat M. Idriss, John Lysmer, R. Scavuzzo and Milomir Stoykovich, SDNPF:Dec 73:III-19
Dsc: H. Bolton Seed, SDNPF:Dec 73:III-47; Asadour H. Hadjian, SDNPF:Dec 73:III-47; Carl J. Costantino, SDNPF:Dec 73:III-49; John Lysmer, SDNPF:Dec 73:III-49; R. Scavuzzo, SDNPF:Dec 73:III-50; Shih-Lung Chu, SDNPF:Dec 73:III-50; Nathan M. Newmark, SDNPF:Dec 73:III-51; L. K. Liu, SDNPF:Dec 73:III-51; P. K. Agrawal, SDNPF:Dec 73:III-52; Izzat M. Idriss, SDNPF:Dec 73:III-53; Robert V. Whitman, 1973

Dar, Sidiq M.
Analysis of Backpacked Liners, with Robert C. Bates, GT7:July 76:739:12242

Darby, William P.
Identifying Urban Flash Flooding Problems, with Mitchell J. Small, WR2:Nov 76:349:12571
Optimization of Urban Air Monitoring Networks, with Paul J. Ossenbruggen and Constantine J. Gregory, EE3:June 74:577:10577
Dsc: Jon C. Liebman and Lewis A. Rossman, EE1:Feb 75:181:11085
Clo: EE4:Aug 75:669:11467
TR:141:97

Darden, Rufus B.
Jet Discharge into a Stratified Reservoir, with Jorg Imberger and Hugo B. Fischer, HY9:Sept 75:1211:11583
TR:141:444

Dare, Charles E.
Transportation, Land Use, and Air Quality Programs, TE2:May 76:411:12124

Darragh, Robert D.
Dsc, with Surendra K. Saxena, NMG:June 76:III-1441, of "Deformation of Deep Excavations", NMG:June 76:II-686

Darve, F.
Incremental Stress-Strain Relationship for Cohesionless Soil, with S. Labanieh and R. Chambon, NMG:June 76:I-264

Darwell, Jon
See David M. McCann, OE75:June 75:401

Darwin, David
Analysis of RC Shear Panels under Cyclic Loading, with David A. Pecknold, ST2:Feb 76:355:11896

Das, Bishnu P.
Channelization of River Bhargavi, India, WW76:Aug 76:1700

Das, Braja M.
Pullout Resistance of Horizontal Anchors, with Gerald R. Seeley, OE75:June 75:434
Shallow Anchor Resistance to Eccentric Uplift Load, with Gerald R. Seeley, TN: GT4:Apr 76:387:12019
Uplift Capacity of Group Piles in Sand, with Gerald R. Seeley and Jonathan E. Smith, TN: GT3:Mar 76:282:11953
Uplift Capacity of Model Piles Under Oblique Loads, with Gerald R. Seeley and Dorairaja Raghu, TN: GT9:Sept 76:1009:12367

Dascal, Oscar
Embankment on Soft and Sensitive Clay Foundation, with Jean-Pierre Tournier, GT3:Mar 75:297:11193
Dsc: John B. Cox, GT11:Nov 75:1173:11674
Clo: GT5:May 76:571:12091
TR:141:263

Dasgupta, Gautam
A Numerical Solution for Viscoelastic Half Planes, EM4:Aug 76:601:12325
See Anil K. Chopra, EM3:June 76:497:12209

Dasgupta, S. P.
Some Finite Element Solutions in the Dynamics of Circular Footings, with N. S.V. Kameswara Rao, NMG:June 76:II-1038

Dash, Umakant
Application of Stability Analyses to Slope Design, NMG:June 76:II-725

Dass, Purshottam
Mathematical Model to Simulate Channel Deformation, with Daryl B. Simons, WW76:Aug 76:1

Dass, Purushottam
Subsurface Drainage Solutions by Galerkin's Method, with Hubert J. Morel-Seytoux, IR1:Mar 74:1:10397
Dsc: Petrus A.C. Raats and Jan van Schilfgaarde, IR4:Dec 74:519:10975; John C. Bruch, Jr., IR1:Mar 75:70:11150; Anand Prakash, IR1:Mar 75:71:11150; Roger E. Smith, IR1:Mar 75:73:11150; E. G. Youngs, IR1:Mar 75:73:11150
Clo: IR4:Dec 75:311:11745
TR:141:105

Datta, Tapan K.
Computerized Inventory of Traffic Signs, with David M. Litvin, TE4:Nov 75:707:11708
TR:141:397

Dattatri, Jade
Dsc, with Irvathur Vasudeva Nayak, WW4:Nov 74:399:10903, of "Characteristics and Behavior of Pacific Coast Tidal Inlets", WW3:Aug 73:325:9927
Dsc, WW4:Nov 74:402:10903, of "Extreme Wave Height Distributions Over Oceans", WW3:Aug 73:355:9939
Dsc, with N. Jothi Shankar and Harihara Raman, WW3:Aug 76:352:12284, of "Effect of Structures on Irregular Waves Compared to Regular Waves", WW3:Aug 75:231:11494
Dsc, with N. Jothi Shankar and Harihara Raman, WW3:Aug 76:363:12284, of "Field Performance of Permeable Breakwater", WW4:Nov 75:357:11703
See Harihara Raman, WW1:Feb 76:99:11882

Davar, Kersi S.
See Nabil D.Abd El-Hadi, HY4:Apr 76:483:12049

Davenport, Alan G.
Dsc, ST11:Nov 76:2235:12510, of "Wind Pressures on Buildings-Probability Densities", ST6:June 75: 1255:11373
See Bjarni V. Tryggvason, ST12:Dec 76:2333:12630

David, A. Ben
See Ilan Amir, IR76:July 76:192

David, Martin
See Patrick Caffrey, EE1:Feb 75:55:11119

David, Martin H.
Statistical Study of Phosphorus Removal in Wisconsin, with Frederick J. Schroeder, J. Jeffrey Peirce, Erhard F. Joeres and Daryl A. Braasch, EE2:Apr 76:433:12045
Dsc: R. W. Ockershausen, EE5:Oct 76:1135: 12436

Davidson, D. Donald
Water Waves Generated by Landslides in Reservoirs, with Bruce L. McCartney, HY12:Dec 75:1489: 11791
TR:141:480

Davidson, Hugh L.
Nonlinear Analyses in Soil and Solid Mechanics, with Wai F. Chen, NMG:June 76:I-205
Dsc: H. B. Muhlhaus, NMG:June 76:III-1475

Davies, Gwynne
See Martin J. Wyatt, TN: EM4:Aug 76:736:12286

Davies, J. Michael
Calculation of Steel Diaphragm Behavior, ST7:July 76:1411:12254

Davis, Allen L.
See Roland W. Jeppson, HY7:July 76:987:12252

Davis, Darryl W.
Optimal Sizing of Urban Flood-Control Systems, HY8:Aug 75:1077:11490
TR:141:412

Davis, Edward H.
See Harry G. Poulos, GT2:Feb 75:189:11144
See Harry G. Poulos, GT7:July 76:787:12273

Davis, Ray Jay
Uniformity among Weather Modification Laws, IR3: Sept 76:285:12379

Davis, Raymond Eugene
Concrete Pipe Culvert Behavior - Part 2, with Alfred E. Bacher, ST3:Mar 74:615:10408
Dsc: Subhash C. Anand, ST1:Jan 75:351:11039
Clo: ST7:July 75:1612:11401
TR:141:39
Concrete Pipe Culvert Behavior—Part 1, with Alfred E. Bacher and John C. Obermuller, ST3:Mar 74: 599:10404
Dsc: Subhash C. Anand, ST1:Jan 75:349:11039
Clo: ST7:July 75:1609:11401
TR:141:35

Davison, B. E.
See J. R. Dunkelberg, CE:Aug 75:32

Dawdy, David R.
See Durl E. Burkham, HY10:Oct 76:1479:12462

Dawson, Amos C.
International Law and Superport Development, OE75:June 75:1462

Day, David A.
Fifty-Year Highlights of Tunneling Equipment, with Bradford P. Boisen, CO2:June 75:265:11393
TR:141:331

Day, Harold John
Flood Damage Reduction Potential of River Forecast, with Kwang K. Lee, WR1:Apr 76:77: 12059
The Green Bay—Fox River System in Transition, WW76:Aug 76:527

Day, J. C.
Outlet Drainage — An Assessment of Environmental Effects, with R. F. Brady and M. J. Staite, IR76: July 76:445

Day, Robert E.
See Carmen F. Guarino, EE5:Oct 76:953:12473

Dea, Stanley J.
Wastewater Reuse Aspects of Energy Complexes, EFEEC:Aug 75:171

Deacon, John A.
See Kenneth R. Agent, TE2:May 76:427:12123

De Alba, Pedro
Sand Liquefaction in Large-Scale Simple Shear Tests, with H. Bolton Seed and Clarence K. Chan, GT9: Sept 76:909:12403

DeAlteris, Joseph T.
Sediment Transport Study, Offshore, New Jersey, with James R. Roney, Lloyd E. Stahl and Chris Carr, OE75:June 75:225

de Ambrosis, Laurence P.
See Harry G. Poulos, GT7:July 76:787:12273

Dean, Donald L.
Dsc, EM5:Oct 75:720:11598, of "Macroapproach for Ribbed and Grid Plate Systems", EM1:Feb 75:25: 11130

Dean, Joseph C.
Contractor Quality Control, with Robert I. Carr and Walter L. Meyer, CO3:Sept 76:535:12422

Dean, Robert G.
See Robert A. Dalrymple, WW3:Aug 75:259:11509
See Jacobus van de Kreeke, WW4:Nov 75:393:11731

Deaner, David G.
See Harvey F. Collins, EE6:Dec 73:761:10190

Dearinger, John A.
Land Surveying Research: 1965-1975, SU1:Oct 75: 51:11649
TR:141:144

Deb, Arun K.
Least Cost Design of Branched Pipe Network System, EE4:Aug 74:821:10711
Dsc: J. R. Appleyard, EE4:Aug 75:675:11467
Clo: EE1:Feb 76:216:11876
TR:141:133
Optimization of Water Distribution Network Systems, EE4:Aug 76:837:12343
Dsc, EE6:Dec 74:1294:10971, of "Equivalent Pipe Methods for Optimizing Water Networks--Facts and Fallacies", EE1:Feb 74:93:10375

de Buen, Oscar
Dsc, ST12:Dec 76:2386:12588, of "Inelastic Sway Buckling of Multistory Frames", ST1:Jan 76:65: 11848

de Bussy, Bruno LeClerc
See Robert G. Lukas, GT9:Sept 76:945:12410

Decker, Rey S.
See James L. Sherard, GT1:Jan 76:69:11846
See James L. Sherard, GT4:Apr 76:287:12052

De Donato, Osvaldo
Local Unloading in Piecewise-Linear Plasticity, with Giulio Maier, EM3:June 76:383:12170
See Leone Corradi, ST9:Sept 74:1925:10832

Dedrick, Allen R.
Water Harvesting — Modern Application of an Ancient Method, CE:Oct 76:86

Deen, Robert C.
See Kenneth R. Agent, TE2:May 76:427:12123

de Estrada, Michael
Test Method for Seismic Qualification of Equipment, PO1:July 74:97:10656
Errata: PO1:July 75:139:11400
TR:141:304

Degenkolb, Henry J.
See Karl V. Steinbrugge, CE:Feb 75:44

DeGroot, William G.
Dsc, with L. Scott Tucker, EE5:Oct 75:863:11596, of "Volume of Storm Water Retention Basins", EE5:Oct 74:1165:10889

Degyansky, Milan E.
Dsc, EE5:Oct 76:1132:12436, of "Design of Integrated Approach to Nutrient Removal", EE1:Feb 76:37:11906

Delleur, Jacques W.
Dsc, with Ramachandra A. Rao, HY6:June 76:795:12164, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445
See Pen-Chih Tao, HY10:Oct 76:1541:12477

Delp, LaRue E.
Economics of Preventive Highway Maintenance, CE:Dec 76:43

Demard, Hubert
Analysis and Management of Water Distribution Systems, with Bernard Bobee and Jean-Pierre Villeneuve, UP2:Nov 75:167:11679
TR:141:366

Demars, Kenneth R.
See Vito A. Nacci, OE75:June 75:380

Demich, G. F.
See Colin B. Brown, ST76:Aug 76:189

DeMichele, Eugene
See Robert E. Cannon, EE6:Dec 74:1205:11012

Demo, David A.
Analysis of Fatigue of Welded Crane Runway Girders, with John W. Fisher, ST5:May 76:919:12106

de Nekker, Jaap
Dredged Material: Natural Resource or National Nuisance, with Kees d'Angremond, DIEE:Jan 76:866

de Neufville, Richard
See Francis Chin, TE1:Feb 76:47:11890

de Neufville, Richard L.
See Robert V. Whitman, ST5:May 75:1067:11309

Denness, Bruce
See David M. McCann, OE75:June 75:401

Dennis, Michael J.
Use of Finite Element Analyses for Railcar Design, TE1:Feb 76:105:11921

Denson, Keith H.
See Melville S. Priest, Preprint No.2636, Apr 76, 6pp.

De Pineres, Oscar G.
Dsc, SDNPF:Dec 73:III-102, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81

Derteano, Felipe U.
Noise in the Urban Environment, UP2:Nov 75:183:11688
TR:141:502

Derthick, Henry W.
Dsc, CE:Nov 75:24, on News in Bridge Decks, CE:Aug 75:60
Dsc, CE:Apr 76:36, on News in Bridge Decks, CE:Aug 75:60

Desai, Chandrakant S.
Approximate Solution for Unconfined Seepage, IR1:Mar 73:71:9607
Dsc: Boris S. Browzin, IR2:June 74:206:10568
Clo: IR3:Sept 75:223:11536
TR:141:22
A General Function for Stress-Strain Curves, with Tien H. Wu, NMG:June 76:I-306
Numerical Design-Analysis for Piles in Sands, GT6:June 74:613:10617
Dsc: Sigurd Heiberg, GT6:June 75:590:11339; Franco Esu and Mario Ottaviani, GT7:July 75:11398
Clo: GT2:Feb 76:177:11878
TR:141:64
Some Aspects of Theory and Applications of Numerical Methods, NMG:June 76:I-58
See Surendra K. Saxena, NMG:June 76:II-1082
See J. H. Amend, NMG:June 76:II-1155
See Surendra K. Saxena, NMG:June 76:III-1419
3-D Analysis of Laterally Loaded Structures, with G. C. Appel, Jr., NMG:June 76:I-405

Desai, Drupad B.
See David G. Hammond, TE1:Feb 76:1:11918

Desai, Harshkumar C.
Volume and Strength of a Dolos, WW1:Feb 76:79:11928

DeSalvo, Joseph M.
Motivating Students Towards Professional Thinking, EI1:Jan 75:47:11081
TR:141:125

Desuyi, Prakash
Ferrocement Load-Bearing Wall Elements, with Arun D. Joshi, ST9:Sept 76:1903:12420

Deschapelles, Bernardo
Dsc, ST12:Dec 76:2382:12588, of "Matrix Analysis of Structure-Foundation Interaction", ST1:Jan 76:251:11836

Deshmukh, Rajabhau S.
Numerical Solution of Moderately Thick Plates, with Robert R. Archer, EM5:Oct 74:903:10860
Errata: EM4:Aug 75:495:11468
TR:141:95

De Simone, Pasquale
Consolidation of Thick Beds of Clay, with Carlo Viggiani, NMG:June 76:II-1067

Desimone, Vincent R.
Planning Criteria for Bikeways, TE3:Aug 73:609:9928
Dsc: Gnanadesikam Ramanujam, TE2:May 74:533:10508; Robert T. Milhous, TE3:Aug 74:787:10698; Karl Briggs, TE4:Nov 74:1000:10901
Clo: TE3:Aug 75:591:11472
TR:141:13

Dette, James T.
Instrumentation for Wave Induced Pore Pressures, with Vahan Tanal and Joseph A. Fischer, OE75:June 75:355

Deussen, Richard R.
Shin-Shen Canal Diversion Structure —, Taipei, Taiwan, WW76:Aug 76:1459

Deutsch, William L.
See Hsai-Yang Fang, GT5:May 76:569:12091

Devlin, Gerald L.
A Statement on Professional Services—Competitive Bidding, EI1:Jan 75:53:11082
TR:141:134

Devlin, William M.
U.S. Coast Guard's Role in Environmental Protection, Preprint No.2725, Apr 76, 10pp.

DeVoy, Robert S.
Evaluating Economic and Energy Consequences of Land-Use Decisions, UP1:Aug 76:105:12331

DeWalle, Poppe B.
See Edward S.K. Chian, EE2:Apr 76:411:12033

Dewey, Charles A., Jr.
Regional and Local Siting Problems with Emphasis on Overall Environmental Impact — Introduction, EFEEC:Aug 75:46
Session II — Land Use, EFEEC:Aug 75:408

Dewey, Frederick B.
Dsc, with Leon Kempner, Jr., ST11:Nov 75:2439:11675, of "Design of Steel Transmission Pole Structures", ST12:Dec 74:2449:11009

Dewey, Haywood C., Jr.
Flow Control and Transients in the California Aqueduct, with Welby R. Madsen, IR3:Sept 76:335:12434

Dewey, Haywood G., Jr.
Start-Up Performance, Hyatt-Thermalito Power Complex, with Robert W. Ehrhart and William H. Young, PO2:Nov 73:405:10169
Dsc: Mohammad Hanif Chaudhry, PO2:Dec 74:217:10976
Clo: PO1:July 75:136:11400
TR:141:205

DeWolf, John T.
Local and Overall Buckling of Cold-Formed Members, with Teoman B. Pekoz and George Winter, ST10:Oct 74:2017:10875
Dsc: David Allen, ST8:Aug 75:1719:11471
Clo: ST2:Feb 76:451:11880
TR:141:99

DeYoung, Raymond K.
Recurrence Intervals of Abnormally High Tides by Superposition of Storm Surges over Astronomical Tides, with James R. Pfafflin, OE75:June 75:79

Dick, Richard I.
Dsc, with John D. Ditmars, EE6:Dec 74:1286:10971, of "Optimal Control of Nitrogen Losses from Land Disposal Areas", EE6:Dec 73:923:10200

Dick, T. Milne
See Jiri Marsalek, HY8:Aug 75:1101:11470

Dickason, Donald G.
College Admissions for Engineering and Technology, CE:Feb 76:60

Dickson, Kenneth L.
Problems in Performing Environmental Assessments, with David W. Kern, William F. Ruska and John Cairns, Jr., HY7:July 75:965:11463
TR:141:402

DiClemente, Thomas J.
Floating Nuclear Plants and Offshore Energy Centers, OE75:June 75:29

Diehl, John A.
Landmarks in Reinforced Concrete, CE:Nov 75:87
TR:141:476

Diekmann, Edward F.
Dsc, CE:Aug 76:28, on The Darwin Cyclone — Valuable Lesson in Structural Design, CE:Dec 75:82

Dietrich, Thomas L.
See James R. Meiman, IR1:Mar 75:41:11197

Dietz, Albert G.H.
Education for Construction, with William A. Litle, CO2:June 76:347:12182
Dsc: Shu-t'ien Li, CO4:Dec 76:700:12582

Diewald, Walter J.
Incorporating Highway Safety into Level of Service, TE2:May 74:417:10557
Dsc: John T. Webster, TE1:Feb 75:176:11090
Clo: TE3:Aug 75:592:11472
TR:141:60

Di Gregorio, David
Dewatering Chemical-Primary Sludges, with Gerald L. Shell, EE5:Oct 76:1087:12474

DiJulio, Roger M., Jr.
See Gary C. Hart, ST2:Feb 75:397:11126

Dilger, Walter H.
Time-Dependent Stresses in Continuous Precast Bridges, with Amin Ghali, CO1:Mar 76:239:11964
1976 T.Y. Lin Award Presented to Walter H. Dilger, Amin Ghali and Maher K. Tadros, with Amin Ghali and Maher K. Tadros, CE:Oct 76:97

Dillingham, James H.
Dsc, HY5:May 76:685:12092, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445

DiMaggio, Frank L.
See Ivan S. Sandler, GT7:July 76:683:12243

Dimmick, Brian W.
See Ish K. Aneja, Preprint No.2704, Apr 76, 30pp.

Dinger, Blaine E.
Terrestrial Impact of Energy Complexes, EFEEC: Aug 75:219

Dingman, S. Lawrence
Management of Connecticut River Flood Problems, WW76:Aug 76:832

Dirlam, John Kent
Dsc, CE:May 75:24, on The Forgotten Engineer: John Stevens and the Panama Canal, CE:Feb 75:54

Diskin, Mordechai H.
Venturi Flumes for Circular Channels, TN: IR3:Sept 76:383:12369

Dismuke, Thomas D.
See Hsai-Yang Fang, GT6:June 75:594:11339

Distefano, Nestor
System Identification of Frames under Seismic Loads, with B. Pena-Pardo, EM2:Apr 76:313:12047

Ditmars, John D.
Dsc, with David M. Shahrabani, HY10:Oct 76:1605:12440, of "Turbulent Jets with Reversible Buoyancy", HY9:Sept 75:1221:11586
See Richard I. Dick, EE6:Dec 74:1286:10971

Di Toro, Dominic M.
Statistical Design of Equalization Basins, EE6:Dec 75:917:11782
TR:141:509
See Donald J. O'Connor, EE2:Apr 75:280:11205

Dixon, John H.
See Clarence N. Freeman, EFEEC:Aug 75:92
See Eugene O'Brien, Preprint No.2688, Apr 76, 22pp.
See Eugene O'Brien, PO2:Nov 76:195:12574

Dixon, Schaefer J.
Dsc, EI3:July 76:291, of "Kansas Solution to Unionism of Professionals", EI3:July 76:283:12253

1975 ASCE Salary Survey, EI2:Apr 76:225:12090

Djalaly, Hossein
Dsc, ST1:Jan 75:345:11039, of "Design Criteria for H-Columns under Biaxial Loading", ST3:Mar 74:579:10400
Dsc, ST9:Sept 75:1984:11537, of "Buckling of Composite Beams in Negative Bending", ST11:Nov 74:2205:10917

Do, Sang Ho
See Ravindra K. Vyas, ST76:Aug 76:205

Dobbs, Norval
See George S. Tseng, ST76:Aug 76:977

Dobos, Peter
See Donaid S. Mansell, ST12:Dec 75:2523:11754

Dobry, Ricardo
Dsc, with Robert V. Whitman, ST5:May 76:1173, of "Estimating Damping of Real Structures", ST9:Sept 75:1823:11554

Dodge, Robert O.
Construction of the 40-Foot Channel in Columbia River, WW76:Aug 76:259

Doherty, Terrence J.
See Charles H. Henager, ST1:Jan 76:177:11847

Domaschuk, Leonard
Nonlinear Settlement Analysis by Finite Element, with Palaniappan Valliappan, GT7:July 75:601:11423
TR:141:351

Dominguez, Richard F.
See Robert W. Haas, Preprint No.2728, Apr 76, 26pp.

Donaldson, Graham F.
Project Formulation in Today's World — Some Rural Development Dimensions, IR76:July 76:700

Dong, Richard G.
Vibration-Absorber Effect under Seismic Excitation, ST10:Oct 76:2021:12495

Donigian, Anthony S., Jr.
Simulation of Agricultural Runoff, with Norman H. Crawford, Preprint No.2670, Apr 76, 27pp.

Donovan, Neville C.
Development of Expectancy Maps and Risk Analysis, with Bruce A. Bolt and Robert V. Whitman, Preprint No.2805, Sept 76, 19pp.
Liquefaction Criteria for the Trans-Alaska Pipeline, with Sukhmander Singh, Preprint No.2752, Sept 76, 30pp.
See Julio E. Valera, Preprint No.2752, Sept 76, 30pp.

Dorman, Albert A.
Interdisciplinary Approach to Central City Development, Preprint No.2749, Sept 76, 10pp.
1976 Harland Bartholomew Award Presented to Albert A. Dorman, CE:Oct 76:102

Dorman, Jack
Economic Evaluation Techniques for Bicycle-Pedestrian Systems: A Case Study, with Michael Everett, BP75:Dec 75:454

Dornhelm, Richard B.
See Yuan Jen, OE75:June 75:1362

Dorrateague, Dennis E.
See James F. Ruff, WW2:May 76:189:12150

Doshi, Viresh A.
See Ross B. Corotis, ST76:Aug 76:72

Dougal, Merwin D.
Reservoir Project Environmental Study, with Kenneth L. Dueker, HY9:Sept 75:1257:11578
TR:141:431

Dougherty, John V.
See Douglas A. Haith, EE5:Oct 76:1055:12481

Dougherty, M. R.
See Shih-Chi Liu, EM3:June 76:395:12208

Doughty, S. Clifford
Dsc, CO3:Sept 75:671:11533, of "Stability of Trenches Filled with Fluids", CO4:Dec 74:533:11006
Dsc, CO3:Sept 75:671:11533, of "Diaphragm Wall Construction Techniques", CO4:Dec 74:605:11025

Doughty, S. Samuel
Deep Sea Construction, CO3:Sept 75:607:11575
TR:141:407

Doughty, Samuel Clifford
Memoir of, TR:141:540

Douglas, James
Past and Future of Construction Equipment — Part III, CO4:Dec 75:699:11778
TR:141:525

Douglas, James L.
See Thomas N. Yancey, Jr., CE:Sept 76:94

Douglas, Terry R.
Theoretical Analysis of Curved Girder Bridges, with Samuel C. Gambrell, Jr., EM5:Oct 74:991:10871
Dsc: Ross A. Close, EM4:Aug 75:495:11468
Clo: EM1:Feb 76:185:11877
TR:141:104

Douty, Richard T.
Optimization of Long-Span Cold-Formed Truss Purlins, with James O. Crooker, ST11:Nov 74:2275:10952
Errata: ST9:Sept 75:1991:11537
TR:141:115

Dove, Lloyd A.
Recycling Allows Zero Wastewater Discharge, CE:Feb 75:48
TR:141:54

Dow, John O.
Instability Mechanisms for Rotating Appendages, with Chuan C. Feng, Preprint No.2801, Sept 76, 27pp.

Dowd, Munson W.
See Charles H. Lawrance, HY4:Apr 76:499:12066

Dowling, Patrick J.
Strength of Steel Box-Girder Bridges, ST9:Sept 75:1929:11550
Dsc: Kevin R. Moffatt, ST6:June 76:1279:12166; Paul A. Frieze, ST10:Oct 76:2086:12441
TR:141:401

Dowman, H. J.
Dsc, SU1:Oct 75:152:11602, of "New Procedure for Numerical Relative Orientation", SU2:Nov 74:155:10962

Downey, Jack D.
A Communications Project — D/FW Airport, EFAN:Dec 74:168
Summary — Case Study of Dallas/Fort Worth Airport, EFAN:Dec 74:165

Dracup, John A.
See Robert Willis, EE2:Apr 75:245:11246

Drake, Elizabeth A.
Resolutions Adopted at the Fourth National Seminar on the Planning, Design and Implementation of Bicycle and Pedestrian Facilities, BP75:Dec 75:591
Tempe Bikeways — The Morning After, BP75:Dec 75:449

Dransfield, Arnold S.
See Roy D. Gear, Preprint No.2720, Apr 76, 18pp.

Drennon, Clarence B.
Landslide Hazard Mapping on a Shoestring, with William G. Schleining, SU1:Oct 75:107:11655
TR:141:263

Dreyer, Roy C.J.
See Lawrence Carlson, CE:Aug 76:47

Dreyfus, Daniel A.
National Land-Use Policy: Is it Needed?, UP1:Aug 76:9:12324
Project Formulation in Today's World — Legislative and Regulatory Aspects, IR76:July 76:626
2020 Hindsight; Another Fifty Years of Irrigation?, IR2:June 75:87:11363
Dsc: Zane Spiegel, IR1:Mar 76:171:11951
Clo: IR3:Sept 76:395:12365
TR:141:378

Driels, Morris
Design of Pressure Transient Control System, HY5: May 75:437:11280
TR:141:305

Driscoll, Richard M.
See Prasanta K. Banerjee, NMG:June 76:I-438

Drisko, John B.
John R. Freeman and His Influence on Hydraulics, Preprint No.2767, Sept 76, 10pp.

Driver, Robert W.
Dsc, CE:Apr 75:22, on Improving Your Writing, CE: Jan 75:60

Drnevich, Raymond F.
See Michael S. Gould, EE5:Oct 76:1127:12436

Drnevich, Vincent P.
Constrained and Shear Moduli for Finite Element, GT5:May 75:459:11319
TR:141:307
Dsc, GT75:June 75:II-244, of "In Situ Measurement of Initial Stress and Deformation Characteristics", GT75:June 75:II-181
See C. Thomas Gorman, GT75:June 75:II-139

Drossos, Michael E.
See Brian B. Willetts, HY12:Dec 75:1477:11796

Duck, Donald J.
Construction of Grand Coulee Third Power Plant, CO4:Dec 75:869:11774
TR:141:514
Reclamation and Western Development, WW76:Aug 76:1114

Duckstein, Lucien
Dsc, with Istvan Bogardi, HY3:Mar 75:558:11148, of "Use of Decision Theory in Reservoir Operation", HY6:June 74:809:10586
See Ferenc Szidarovsky, EM5:Oct 75:609:11621
See Martin M. Fogel, IR76:July 76:349
See Andre Musy, IR3:Sept 76:317:12390

Dudgeon, Colin R.
See Pongsarl Huyakorn, HY9:Sept 76:1149:12383

Dueker, Kenneth L.
See Merwin D. Dougal, HY9:Sept 75:1257:11578

Dufalla, Michael H.
Dsc, Professional Praise, CE:July 76:28

Duffey, Thomas A.
Simplified N-Dimensional Interaction Surfaces, with Howard L. Schreyer, ST7:July 76:1291:12230

Dufournaud, C.
See A. P. Grima, IR76:July 76:418

Duhau, R.
See J. F. Jullien, EM5:Oct 76:867:12486

Duke, Harold R.
See David B. McWhorter, IR2:June 76:193:12185

Duke, T. J.
Dsc, CE:Oct 75:35, on The Floating Cover: Best Way to Cover a Finished-Water Reservoir?, CE: June 75:75

Dukes, Michael T.
See Richard L. Meehan, GT9:Sept 75:933:11590

Duncan, Donald M.
See Ramesh C. Joshi, TE4:Nov 75:791:11730

Duncan, James M.
See Poul V. Lade, GT10:Oct 75:1037:11670
See Poul V. Lade, GT1:Jan 76:51:11841
See Yoshio Ozawa, NMG:June 76:I-243

Dunder, Vera F.
Choice and Application of Computer Programs in Pipe Whip Analysis, with Klaus-Jurgen Bathe, STN75:Dec 75:II-379

Dunham, James W.
See James R. Walker, OE75:June 75:879

Dunkelberg, J. R.
Dsc, with R. E. Ruma, T. J. Foss, D. E. Bruggers, R. B. Chenoweth and B. E. Davison, CE:Aug 75:32, on Frost Heaves — A Major Dilemma for Ice Arenas, CE:Mar 75:62

Dunn, A. Kenneth
Case History — Problems in Obtaining Repairs to Barber Dam, EFRLD:Sept 75:93

Dunne, James E.
Passenger Evaluation of D/FW Airport, EFAN:Dec 74:207

Dunnigan, Lorn P.
See James L. Sherard, GT1:Jan 76:69:11846
See James L. Sherard, GT4:Apr 76:287:12052

Dunstan, William M.
Spartina Revegetation on Dredge Spoil in SE Marshes, with Gregory L. McIntire and Herbert L. Windom, WW3:Aug 75:269:11530
TR:141:419

Durgin, William W.
Wave Induced Pressures on Submerged Plates, with Jong-Chiang Shiau, WW1:Feb 75:59:11098
Dsc: Harihara Raman, N. Jothi Shankar and Jade Dattatri, WW1:Feb 76:99:11882
Clo: WW4:Nov 76:477:12512
TR:141:220

Durgunoglu, H. Turan
Dsc, with Semih S. Tezcan, GT12:Dec 74:1303: 10973, of "Vibratory In Situ and Laboratory Soil Moduli Compared", SM12:Dec 73:1055:10219

Durrant, S. Olani
See P. Packia Raj, ST8:Aug 76:1575:12329

Dutt, Rathindra N.
See Michael W. O'Neill, GT6:June 76:658:12163

Dworsky, Leonard B.
Water Resources Planning in America: 1776 to 1976 — Impact of Other Policies on Water Planning: Public Health, with Bernard B. Berger, Preprint No.2754, Sept 76, 16pp.

Dwyer, James D.
Fifty-Year Development: Construction of Steel Suspension Bridges, CO1:Mar 75:105:11176
TR:141:166

Dyhouse, Gary R.
Dsc, WW2:May 76:277:12095, of "Man-Induced Changes of Middle Mississippi River", WW2:May 75:119:11281

Dylla, A. S.
Irrigation Management Decisions for Minimizing Nitrate Leaching, with D. R. Timmons and Hollis Shull, IR76:July 76:168

Dysart, Benjamin C., III
Public Participation and Energy Complexes: An Overview, EFEEC:Aug 75:365
Sediment Transport in a South Carolina Mountain Stream, with Charles H. Langdon, III, IR76:July 76:56
See David W. York, TN: WR2:Nov 76:409:12577

Dyson, Gerald R.
Community Environmental Action Program for Civil Engineers, EI2:Apr 75:259:11211
TR:141:175

Dzurik, Andrew A.
Impact of Dredge and Fill on Coastal Economic Development, DIEE:Jan 76:378

Eades, G. V.
Impact of Urban Utility Corridors on Agricultural Drainage, with A. M. Shady and Robert S. Broughton, IR76:July 76:155

Eads, James B.
James B. Eads: A Great River Man, CE:Apr 76:9

Easley, John T.
Buckling Formulas for Corrugated Metal Shear Diaphragms, ST7:July 75:1403:11429
Dsc: Cedric Marsh, ST1:Jan 76:304:11819; Paul P. Fazio, Kinh H. Ha and Sithambaram Chockalingam, ST3:Mar 76:684:11952; R. M. Lawson, ST5:May 76:1168:12093
Clo: ST12:Dec 76:2374:12588
TR:141:339

Easterling, Robert G.
Dsc, with Lyman W. Heller, GT10:Oct 76:1126:12439, of "Statistics of Liquefaction and SPT Results", GT11:Nov 75:1135:11701

Eaton, E. D.
Dsc, HY5:May 76:686:12092, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445

Eaton, Joan E.
See W. Edgar Watt, IR76:July 76:580

Eaton, Keith J.
Cladding and the Wind, ST5:May 76:1043:12114

Ebner, Alan M.
Dsc, STN75:Dec 75:II-274, of "New Licensing Philosophy Concerning Soil Structure Interaction", STN75:Dec 75:II-238

Ecker, Richard M.
See John F. Sustar, DIEE:Jan 76:736

Eddie, A. G.F.
Concrete Replaces Steel in Offshore Coal-Loading Terminal, CE:Apr 76:60

Edge, Billy L.
The Present Perspective of Edge Waves and Coastal Dynamics, OE75:June 75:265

Edgeley, Toney
See Elsayed M. Elsawy, WW76:Aug 76:1039

Edgell, Geoffrey J.
Dsc, WW1:Feb 76:106:11882, of "Wave Motion in Rockfill", WW2:May 75:145:11286

Edgerton, Robert H.
See D. Wozniak, EE3:June 76:567:12197

Edwards, Allan B.
See Carmen F. Guarino, EE4:Aug 74:919:10722

Edwards, Norman W.
Containment Vessel Design —ASME Section III Division 1 Versus Division 2, STN75:Dec 75:II-361

Edwards, William E.
Dsc, ST12:Dec 76:2398:12588, of "Further Aspects of Design by PΔ Model", ST3:Mar 76:487:11973

Egar, David L.
See Ronald D. Townsend, HY5:May 75:529:11312

Eggleston, David M.
Low-Energy Dual-Mode Transit, Preprint No.2689, Apr 76, 12pp.

Egilsrud, Philip E.
See Allan B. MacPherson, CE:Feb 75:64

Ehasz, Joseph L., Jr.
Liquefaction Considerations in Nuclear Plant Design, with William F. Mercurio, STN75:Dec 75:II-142

Ehrhart, Robert W.
See Haywood G. Dewey, Jr., PO2:Nov 73:405:10169
See Cortland C. Lanning, Preprint No.2716, Apr 76, 19pp.

Eichenberger, Bert A.
See Nancy E. Folks, EE4:Aug 75:607:11518

Eide, Ove
See Jean-Herve Prevost, WW4:Nov 75:464:11677

Eigerman, Maria R.
See Harry E. Schwarz, HY5:May 75:603:11296

Eimer, Noam
Practical Applications of the Mini Computer to Structure in Railway Maintenance Programs, with Richard A. Teichman, Jr., ST76:Aug 76:675

Einstein, Elizabeth Roboz
Dsc, HY1:Jan 76:112:11817, of "Hans A. Einstein's Contributions in Sedimentation", HY5:May 75:469:11290

Einstein, Herbert H.
See David S. Campbell, GT76:Aug 76:415

Eisenhauer, David L.
Design of Integrated Approach to Nutrient Removal, with Ronald B. Sieger and Denny S. Parker, EE1:Feb 76:37:11906
Dsc: Milan E. Degyansky, EE5:Oct 76:1132:12436

Eisenstein, Zdenek
Analysis of Consolidation in Cores of Earth Dams, with Addanki V.G. Krishnayya and Steven T.C. Law, NMG:June 76:II-1089
See Abbanki V. Gopala Krishnayya, GT9:Sept 74:1051:10828

Ekberg, Carl E., Jr.
See Max L. Porter, ST3:Mar 75:615:11151
See Max L. Porter, ST11:Nov 76:2121:12528
See Max L. Porter, ST12:Dec 76:2255:12611

Ekizian, Harry
Anchorage Port Survives Nature, CE:Dec 76:64

El-Aini, Yehia M.
Effect of Foundation Stiffness on Track Buckling, EM3:June 76:531:12216

El-Dakhakhni, Wagih M.
Shear of Light-Gage Partitions in Tall Buildings, ST7: July 76:1431:12257

Eldridge, Albert M.
Austin's 11-Mile Sewer Tunnel Reflects Sound Economic, Environmental Alternatives, CE:Aug 76: 52

Eleuterius, Lionel H.
Transplanting Maritime Plants to Dredged Material in Mississippi Waters, with Hugh A. McClellan, DIEE:Jan 76:900

Elfren, Lennart
Torsion-Bending-Shear Interaction for Concrete Beams, with Inge Karlsson and Anders Losberg, ST8:Aug 74:1657:10749
Dsc: Himat T. Solanki, ST3:Mar 75:621:11151; Ganpat S. Pandit, ST7:July 75:1617:11401; Mahmoud A. Helmy, ST8:Aug 75:1712:11471
Clo: ST1:Jan 76:289:11819
TR:141:76

El-Hadi, Nabil D.Abd
Longitudinal Dispersion for Flow over Rough Beds, with Kersi S. Davar, HY4:Apr 76:483:12049

El Hafez, M. Bassam
Preliminary Plastic Design of Tall Steel Frames, with Graham H. Powell, ST9:Sept 74:1837:10796
Dsc: Francois Cheong Siat Moy, ST6:June 75: 1294:11342
Clo: ST12:Dec 75:2678:11746
TR:141:87
See Graham H. Powell, ST8:Aug 74:1611:10739

Eliassen, Rolf
Rolf Eliassen Elected to Honorary Membership, CE: Oct 76:94

Eliasson, J.
See Thorbjorn Karlsson, OE75:June 75:1232

El-Khashab, Ahmed
Experimental Investigation of Flow Over Side Weirs, with Kenneth V.H. Smith, HY9:Sept 76:1255:12402

Ellam, Joseph J.
Conference Summary, EFRLD:Sept 75:181
Opening Remarks, EFRLD:Sept 75:1

Elleby, Hotten A.
Service Load and Fatigue Tests on Truss Bridges, with Wallace W. Sanders, Jr., F. Wayne Klaiber and M. Douglas Reeves, ST12:Dec 76:2285:12625
See Wallace W. Sanders, Jr., ST7:July 76:1383:12247
See Max L. Porter, ST12:Dec 76:2255:12611

Ellett, D. Maxwell
See John R. Banister, GT10:Oct 76:1073:12471

Ellingson, David G.
Conference Review and Evaluation, EFAN:Dec 74: 287

Elliott, Brady A.
Salinity Induced Horizontal Estuarine Circulation, with Robert O. Reid, WW4:Nov 76:425:12550

Ellis, John S.
See Raymond J. Smith, ST1:Jan 75:249:11071

Elmeged, Amr Abd
See Hota V.S. GangaRao, EM1:Feb 75:25:11130

Elms, David G.
See Rowland Richards, Jr., EI4:Oct 74:293:10845

El Nimeiri, Mahjoub
See Zdenek P. Bazant, EM6:Dec 73:1259:10247

ElNimeiri, Mahjoub M.
Dsc, ST10:Oct 76:2092:12441, of "Overall Elastic Stability of Multistory Buildings", ST12:Dec 75: 2487:11762

Elsawy, E. M.
See Elsayed Alan Ervine, HY1:Jan 76:102:11817

Elsawy, Elsayed M.
Flood Routing Through a Balancing Lake, with Toney Edgeley, WW76:Aug 76:1039
See Robert C. Myers, HY7:July 75:933:11452

Emerson, Gerald G.
A Fail-Safe Subaqueous Concrete Sewer, CE:Sept 75: 77
TR:141:355

Emery, Austin H.
Environmentally Sensitive Construction Procedures, CE:Mar 75:87
TR:141:138
Polymer-Concrete Passes Toughest Test, with Meyer Steinberg, CE:June 76:61

Emison, Gerald A.
See William C. Lienesch, WR2:Nov 76:283:12556

Emkin, Leroy Z.
See R. Richard Avent, ST4:Apr 76:821:12061
See Joseph P. Nicoletti, ST76:Aug 76:796

Enfield, Carl G.
Fate of Wastewater Phosphorus in Soil, with Bert E. Bledsoe, IR3:Sept 75:145:11593
TR:141:493
Phosphorus Model of Muskegon Wastewater System, with Lowell E. Leach, EE6:Dec 75:911:11775
TR:141:499

Engelen, Rodney E.
New Institutions for Joint Development, UP1:May 75:11:11288
TR:141:2
Nicollet Avenue Case Study, EFAN12:Dec 74:231
Nicollet Avenue Case Study, Preprint No.2672, Apr 76, 14pp.
Summary for Session V—Case Study of a Central City Mall, EFAN:Dec 74:275
1976 Arthur M. Wellington Prize Presented to Rodney E. Engelen, CE:Oct 76:102

Engelund, Frank
Flow and Bed Topography in Channel Bends, HY11: Nov 74:1631:10963
Dsc: Subhash C. Jain, HY9:Sept 75:1290:11535; Chin-lien Yen, HY10:Oct 75:1367:11600
Clo: HY3:Mar 76:416:11950
TR:141:164
Hydraulics of Surface Buoyant Jet, HY9:Sept 76: 1315:12409

Engen, Kjell Oistein
See Ken P. Chong, Preprint No.2807, Sept 76, 22pp.

Engler, R. M.
See J. M. Brannon, DIEE:Jan 76:455

Engman, Edwin T.
Regional Impacts from Water Consumption and Heat Disposal in River Basins and Estuaries, EFEEC: Aug 75:131

Enkeboll, William
Some Geotechnical Aspects of Marginal Wharf Design, with Vernon A. Smoots, Preprint No.2699, Apr 76, 24pp.

Epps, Jon A.
See Don Saylak, TE1:Feb 75:97:11106

Epstein, Howard I.
Minimum Weights for Circular Tube Cantilever Beams, with Jasim M. Alsaigh, TN: ST1:Jan 76: 318:11821
Seismic Design of Liquid-Storage Tanks, ST9:Sept 76:1659:12380
See Gordon R. Johnson, GT8:Aug 75:789:11522
See Dharapuram S. Jagannathan, ST12:Dec 75:2641: 11799
See Gordon R. Johnson, ST5:May 76:993:12109
See Gordon R. Johnson, EM4:Aug 76:746:12278

Ergatoudis, John G.
See Fukashi Miyahara, ST1:Jan 76:251:11836

Erikson, Carl A.
Estimating—State-of-the-Art, with LeRoy T. Boyer, CO3:Sept 76:455:12382

Ernst, George C.
See Gerald M. Smith, ST2:Feb 74:391:10355

Errera, Samuel J.
Design of I-Shaped Beams with Diaphragm Bracing, with Tamirisa V.S.R. Apparao, ST4:Apr 76:769: 12051
Dsc: Paul P. Fazio, Kinh H. Ha and Sithambaram Chockalingam, ST12:Dec 76:2400:12588
Design of I-Shaped Columns with Diaphragm Bracing, with Tamirisa V.S.R. Apparao, ST9:Sept 76:1685:12397
Dsc, ST8:Aug 76:1639:12281, of "Design of Diaphragm-Braced I-Beams", ST10:Oct 75:2045: 11615
See Shien T. Wang, ST11:Nov 75:2337:11724

Ervine, Elsayed Alan
Dsc, with E. M. Elsawy, HY1:Jan 76:102:11817, of "Low-Head Air Regulated Siphons", HY3:Mar 75: 329:11155

Erzurumlu, Hacik
See A. L. Wagner, Preprint No.2695, Apr 76, 25pp.

Escalante, E.
The Corrosion of Coated Steel Piles in the Ocean, with W. P. Iverson and W. F. Gerhold, Preprint No.2733, Apr 76, 22pp.

Esmaili, Houshang
Control of Gas Flow from Sanitary Landfills, EE4: Aug 75:555:11525
Dsc: Hamilton Gray and Charles A. Moore, EE1: Feb 76:229:11876
Clo: EE5:Oct 76:1125:12436
TR:141:410

Estrella, Efren
See Edward C.K. Tom, GT76:Aug 76:264

Esu, Franco
Dsc, with Mario Ottaviani, GT7:July 75:11398, of "Numerical Design-Analysis for Piles in Sands", GT6:June 74:613:10617

Evangelista, Aldo
Accuracy of Numerical Solutions for Laterally Loaded Piles in Elastic Half-Space, with Carlo Viggiani, NMG:June 76:III-1367

Evan-Iwanowski, Ross M.
See Gene K. Baxter, ST9:Sept 75:1749:11568

Evans, Harold G.
Management Careers for Engineers, EI4:Oct 76:409: 12497

Evans, Llewellyn
Memoir of, TR:141:541

Evans, Ralph L.
See Veerasamy Kothandaraman, EE3:June 74:785: 10564

Evans, Rick R.
A Heuristic Game for Material Selection in Structural Design Using the Hybrid Computer, with Subhash C. Anand and Myron Spector, Preprint No.2737, Sept 76, 25pp.

Evans, Robert G.
See Gaylord V. Skogerboe, IR76:July 76:19

Everett, Lorne G.
See Guenton C. Slawson, Jr., EE1:Feb 76:127:11945

Everett, Michael
See Jack Dorman, BP75:Dec 75:454

Everts, Craig H.
Sediment Discharge by Glacier-Fed Rivers in Alaska, WW76:Aug 76:907
Shoaling Rate Prediction Using a Sedimentation Tank, OE75:June 75:294

Ewald, Roberta H.
Computer-Based Technology Transfer, with Charles H. Goodspeed, Richard A. Jones, Robert R. Smith, Daniel R. Rehak, John G. Voreades and Ben Y.C. Wong, EI2:Apr 75:175:11228
TR:141:213

Ewing, David J.F.
Dsc, EM5:Oct 75:713:11598, of "Buckling of Cylindrical Shells by Wind Pressure", EM5:Oct 74: 1005:10874

Exnicios, John F.
Types of Street Use in New Orleans, BP75:Dec 75: 10

Eyre, Dale G.
Shakedown of Beams on Flexible Supports, with Theodore V. Galambos, ST5:May 76:935:12101

Eyster, Gary L.
Variation of Suspended Sediment in Sand Bed Canals, with Khalid Mahmood, WW76:Aug 76:924

Eyster, Joan
See Yishu Chiu, TN: EE6:Dec 76:1285:12638

Faillace, George A.
Foundation Considerations for a Nuclear Power Plant, CO1:Mar 75:165:11181
Dsc: James V. Hamel, CO3:Sept 75:679:11533
TR:141:179

Fair, Harlan W.
Construction Economy: What Price Environmental Controls?, CO3:Sept 76:521:12427

Fairhead, Edmund A.
See Robert S. O'Neil, CE:Sept 76:70

Fairweather, Virginia
ASCE Local Level Public Service Actions Have Big Impact, CE:June 75:51
TR:141:240
ASCE Minority Group Counseling Under Way, CE: Aug 75:54
TR:141:311
Bailey's Crossroads: A/E Liability Test, CE:Nov 75: 58
TR:141:450
Current Competence: Current Dilemma, CE:July 75: 50
TR:141:278
Flow Equalization—Plus for Wastewater Treatment Plants, CE:Sept 75:66
TR:141:342
Fly Ash Pavements, Run Ways to Take Off?, with Marvin L. Byington, CE:Aug 75:57
TR:141:317

The Forgotten Engineer: John Stevens and the Panama Canal, CE:Feb 75:54
Dsc: Nathan A. Bowers, CE:Apr 75:24; Ralph H. Mann, CE:Apr 75:26; Alfred F. Samuel, Jr., CE: May 75:24; John Kent Dirlam, CE:May 75:24
TR:141:60
How Concerned Should Civil Engineers be with Fire Protection?, CE:Mar 75:57
Dsc: Joseph H. Newman, CE:June 75:36; Charles E. Schaffner, CE:Aug 75:36
TR:141:95
Renovation and Recycling — New Life for Old Buildings, CE:Oct 75:69
Dsc: Richard A.P. Ortega, CE:Jan 76:22
TR:141:413
Salt Damaged Bridge Decks: Cathodic Helps, CE: Sept 75:88
TR:141:369
What's New in Water Treatment?, CE:Sept 75:69
Dsc: David Kittredge, CE:Jan 76:28; Steven J. Medlar, CE:Jan 76:28
TR:141:345

Falick, James
Staff Versus Administration Versus Board or the Planning Process Organized for Consensus Instead of Conflict, with David Burdick and Henry Winkelman, Preprint No.2701, Apr 76, 23pp.
Working with the Health Client, EFAN:Dec 74:116

Fallah, M. H.
See Cheng Y. Yang, OE75:June 75:134

Falvey, Henry T.
Prediction of Wind Wave Heights, WW1:Feb 74:1: 10324
Dsc: Subrata K. Chakrabarti, WW1:Feb 75:115: 11091
Clo: WW4:Nov 75:453:11677
TR:141:66

Fam, Adel R.M.
Model Study of Horizontally Curved Box Girder, with Carl J. Turkstra, ST5:May 76:1097:12151

Fan, Horn Ming
See Conrad P. Heins, ST11:Nov 76:2163:12538

Fang, Ching S.
See A. Y. Kuo, OE75:June 75:1065

Fang, Hsai-Yang
Dsc, with Thomas D. Dismuke, GT6:June 75:594: 11339, of "H-Bearing Piles in Limestone and Clay Shales", GT7:July 74:787:10667
Dsc, with William L. Deutsch, GT5:May 76:569: 12091, of "Behavior of Compacted Soil in Tension", GT9:Sept 74:1051:10828

Fanjiang, Guang-Nan
See Stuart E. Swartz, ST5:May 75:1097:11298

Farell, Cesar
Mean Wind Loading on Rough-Walled Cooling Towers, with Oktay Guven and Federico Maisch, EM6:Dec 76:1059:12647

Faris, Richard K.
See William J. Grabske, Preprint No.2803, Sept 76, 23pp.

Farquhar, Grahame J.
See Peter M. Huck, EE3:June 74:733:10629

Farragut, Paul R.
Evaluation of the Maryland Bikeway Program, BP75: Dec 75:443

Farrell, R. Paul, Jr.
Dsc, HY3:Mar 76:442:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75: 847:11445

Farzin, M. Hassan
See Raymond J. Krizek, GT12:Dec 74:1275:11030

Fast, Arlo W.
Comparative Study With Costs of Hypolimnetic Aeration, with Marc W. Lorenzen and J. Harlan Glenn, EE6:Dec 76:1175:12629
Synoptic Survey of Hypolimnetic Aeration, with Marc W. Lorenzen, EE6:Dec 76:1161:12628

Fasullo, Eugene J.
La Guardia Airport Parking and Terminal Frontage Structure, CE:Mar 76:53

Fattal, S. George
See Felix Y. Yokel, ST3:Mar 76:515:11992

Fazio, Paul P.
Dsc, with Kinh H. Ha and Sithambaram Chockalingam, ST3:Mar 76:684:11952, of "Buckling Formulas for Corrugated Metal Shear Diaphragms", ST7:July 75:1403:11429
Dsc, with Kinh H. Ha and Sithambaram Chockalingam, ST12:Dec 76:2400:12588, of "Design of I-Shaped Beams with Diaphragm Bracing", ST4:Apr 76:769:12051
See Alan D. Russell, CE:Apr 75:86

Feachem, Richard G.
Water Supplies for Low-Income Communities in Developing Countries, EE5:Oct 75:687:11608
Dsc: Santosh R. Goswami, EE2:Apr 76:492: 12010; Wright Hiatt, EE2:Apr 76:495:12010; Robert L. McFall, EE4:Aug 76:866:12277
Errata: EE2:Apr 76:496:12010
TR:141:422

Feder, Richard C.
Dsc, TE3:Aug 76:602:12282, of "Bicycles and Traffic", TE4:Nov 75:753:11729

Felippa, Carlos A.
Dsc, ST12:Dec 74:2521:10977, of "Incremental Finite Element Matrices", ST12:Dec 73:2423:10226

Fellenius, Bengt H.
Test Loading of Piles and New Proof Testing Procedure, GT9:Sept 75:855:11551
Dsc: Luciano Picarelli, GT7:July 76:813:12224
TR:141:435
Dsc, GT4:Apr 75:412:11208, of "Reducing Negative Friction with Bitumen Slip Layers", GT8:Aug 74: 925:10764

Fendley, William E.
The Trouble with Municipal Public Works, EI2:Apr 76:173:12077

Feng, Chuan C.
See Jimmy L. Noland, ST4:Apr 75:677:11220
See John O. Dow, Preprint No.2801, Sept 76, 27pp.

Fennell, Clarence J., III
See Subhash C. Anand, TN: ST1:Jan 76:313:11821

Fenves, Steven J.
Formal Representation of Design Requirements, ST76:Aug 76:739
See Douglas J. Nyman, ST4:Apr 75:697:11227

Ferguson, Glen
See Richard L. Handy, GT75:June 75:II-168

Ferguson, Harry F.
See James V. Hamel, GT76:Aug 76:217

Ferguson, Phil M.
Turner Medal to Ferguson, CE:Sept 76:112

Ferraz, Octavio Marcondes
Dsc, Bicentennial Congrats, CE:Sept 76:32

Ferreira Filho, Walter M.
See Fazal H. Chaudhry, TN: HY9:Sept 76:1387: 12368

Fertis, Demeter G.
Concrete Material Response by Acoustic Spectra Analysis, ST2:Feb 76:387:11943

Ferver, Greer W.
Thermal Effect Loads of Ships on Dock Floors, with J. Richard Lawrence, Preprint No.2651, Apr 76, 10pp.

Fialkow, Morris N.
Limit Design of Folded Plate Structures, ST76:Aug 76:222
Plastic Collapse of Folded Plate Structures, ST7:July 75:1559:11465
TR:141:370

Field, Richard
Urban Runoff Pollution Control—State-of-the-Art, with John A. Lager, EE1:Feb 75:107:11129
Dsc: Jochen Kuhner and Michael Shapiro, EE1: Feb 76:220:11876
Clo: EE4:Aug 76:863:12277
TR:141:3
Dsc, HY3:Mar 76:443:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75: 847:11445
See David J. Cesareo, EE5:Oct 75:775:11645
1976 ASCE State-of-the-Art of Civil Engineering Award Presented to Richard Field and John A. Lager, with John A. Lager, CE:Oct 76:101

Fields, Jo Ann
See Floyd I. Thiel, TE4:Nov 76:727:12539

Fietz, Trevor R.
Dsc, HY3:Mar 75:561:11148, of "Transformation of Moody Diagram", HY6:June 74:797:10624
Dsc, HY11:Nov 75:1461:11672, of "Sparsity Oriented Analysis of Large Pipe Networks", HY4: Apr 75:341:11260

Filliben, James J.
See Emil Simiu, ST9:Sept 76:1861:12381

Fillos, John
Phosphate Release and Sorption by Lake Mohegan Sediments, with Hiranmay Biswas, EE2:Apr 76:239: 12029

Finn, W. D. Liam
Constitutive Laws for Sand in Dynamic Shear, with Kwok Wing Lee and Geoffrey R. Martin, NMG: June 76:I-270
An Effective Stress Model for Liquefaction, with Kwok Wing Lee and Geoffrey R. Martin, Preprint No.2752, Sept 76, 30pp.
Nonlinear Analysis of Earth Structures, with Ronald Ian S. Miller, NMG:June 76:I-194
Numerical Solution of Unconfined Seepage Problems, with Erol Varoglu, NMG:June 76:III-1465
Seismic Response and Liquefaction of Sands, with Peter M. Byrne and Geoffrey R. Martin, GT8:Aug 76:841:12323
See Geoffrey R. Martin, GT5:May 75:423:11284

Fischer, Henry W.
See Egbert R. Hardesty, CO3:Sept 75:511:11565
See Egbert R. Hardesty, CO3:Sept 75:529:11594

Fischer, Hugo B.
Some Remarks on Computer Modeling of Coastal Flows, WW4:Nov 76:395:12520
Dsc, EE3:June 75:453:11337, of "Simple Method for Predicting Dispersion in Streams", EE4:Aug 74: 997:10708
See Rufus B. Darden, HY9:Sept 75:1211:11583

Fischer, Joseph A.
Design Forces for Offshore Nuclear Power Plant Construction, with Ian Watson, Harcharan Singh, T. D. Lu, Surendra K. Saxena, Demetrious Koutsoftas and Lloyd E. Stahl, OE75:June 75:1
Role of Offshore Nuclear Power Plants, with Harcharan Singh, PO1:July 75:1:11407
Errata: PO2:Nov 76:228:12509
TR:141:387
See James T. Dette, OE75:June 75:355
See Surendra K. Saxena, OE75:June 75:450
See Demetrious Koutsoftas, GT9:Sept 76:989:12431

Fish, Robert E.
Water-Temperature Changes Downstream from a Major Reservoir at Cannonsville, N.Y., with Nobuhiro Yotsukura, IR76:July 76:481

Fisher, Charles H.
San Diego Harbor — Past and Present, Preprint No.2783, Sept 76, 4pp.

Fisher, John S.
Analytical Prediction of Shoreline Erosion, with Leif F. Gulbrandsen and Victor M. Goldsmith, OE75: June 75:161

Fisher, John W.
Connections for Steel Structures — History, State of Art, and Potential Developments, Preprint No.2748, Sept 76, 21pp.
See David A. Demo, ST5:May 76:919:12106

Fisk, Edward R.
Specifications—Design Professionals' Forgotten Challenge, CO2:June 76:303:12171

FitzPatrick, Joseph A.
Dsc, EE1:Feb 76:217:11876, of "Physicochemical Approach to Water and Wastewater Filtration", EE1:Feb 75:71:11120
See Raymond J. Krizek, DIEE:Jan 76:609

FitzSimons, Neal
American Wooden Bridges, AWB:76, 176pp.
A Comparative Study of Structural Response to Explosion-Induced Ground Motions, SREGM:75, 138pp.
Guidance for Load Tests of Buildings, with Anatole Longinow, ST7:July 75:1367:11431
TR:141:344
See Richard Bares, ST5:May 75:1111:11322
1976 Civil Engineering History and Heritage Award Presented to Neal FitzSimons, CE:Oct 76:104

Flake, Robert H.
See Benjamin J. Olufeagba, EE1:Feb 76:95:11939
See Bhaskara R. Penumalli, EE1:Feb 76:191:11946

Flammer, Gordon H.
See Gary Z. Watters, HY7:July 76:831:12236

Flanagan, Richard F.
Fundamentals of Piping, Preprint No.2766, Sept 76, 18pp.
See Fred H. Kulhawy, GT3:Mar 75:243:11161

Flatt, Paul E.
Assessment of Environmental Impact on the Aquatic Environment with Limited Field Data, with Charles D.D. Howard, IR76:July 76:435

Fleischer, Peter
See John C. Ludwick, WW4:Nov 75:357:11703

Fleming, Paul
Some Thoughts on Zero Discharge, EI2:Apr 76:179: 12082
Dsc, EE6:Dec 76:1302:12583, of "Persistence of Virus on Sewage-Irrigated Vegetables", EE1:Feb 76: 29:11935

Fleming, Paul J.
Dsc, EE5:Oct 74:1194:10836, of "Recommendations for Environmental Engineering Education", EE2: Apr 74:243:10459

Fling, Russell S.
Early Developments in American Concrete, Preprint No.2791, Sept 76, 24pp.

Floess, Carsten H.L.
See Thomas F. Zimmie, IR76:July 76:40

Flook, Lyman R., Jr.
Initial Operation of the Pakistan Link Canals, WW76:Aug 76:1737

Floyd, Charles F.
Whither Goest the Bikeway Boom?, BP75:Dec 75: 471

Focht, John A, Jr.
See Kenneth L. Lee, GT1:Jan 75:1:11054
1976 Thomas A. Middlebrooks Award Presented to John A. Focht, Jr. and Kenneth L. Lee, with Kenneth L. Lee, CE:Oct 76:97

Fogarty, William J.
Trip Production Forecasting Models for Urban Areas, TE4:Nov 76:831:12557

Fogel, Martin M.
An Event-Based Formulation of Watershed Management, with Lucien Duckstein and Andre Musy, IR76:July 76:349

Foley, Michael G.
Automated Wet Sand Feeder for Open-Circuit Flumes, with Elton F. Daly, TN: HY1:Jan 76:136: 11820

Folks, Nancy E.
Pyrolysis as Means of Sewages Sludge Disposal, with R. Addis Lockwood, Bert A. Eichenberger, Frank R. Bowerman and Kenneth Y. Chen, EE4:Aug 75: 607:11518
TR:141:398

Fong, Calvin C.
See Thomas H. Wakeman, Preprint No.2712, Apr 76, 18pp.

Foo, Stephen H.C.
See Hudson Matlock, GT12:Dec 76:1291:12585

Foott, Roger
See Charles C. Ladd, GT7:July 74:763:10664
1976 Norman Medal Presented to Roger Foott and Charles C. Ladd, with Charles C. Ladd, CE:Oct 76: 96

Ford, Dennis E.
See Heinz Stefan, HY1:Jan 75:97:11058

Ford, Gerald
Ford and Carter—Their Views on Technology, CE: Oct 76:70

Foree, Edward G.
Reaeration and Velocity Prediction for Small Streams, EE5:Oct 76:937:12448

Forester, John
Teaching the Proper Use of Bicycle Facilities, BP75: Dec 75:533

Formby, J. R.
See Thomas R. Mongan, TE3:Aug 75:437:11483

Foroud, Nader
See Ashim K. Bhattacharya, Preprint No.2773, Sept 76, 18pp.

Fortey, Joseph W.
Experimental Methods and Instrumentation for Power Generation Structures — Some Case Studies, with Raymond R. Funk, Preprint No.2717, Apr 76, 25pp.

Foschi, Ricardo O.
Analysis and Design of Griplam Nailed Connections, with Jack Longworth, ST12:Dec 75:2537:11766
TR:141:498

Foss, T. J.
See J. R. Dunkelberg, CE:Aug 75:32

Foster, Edwin P.
Dsc, with L. Bogue Sandberg, ST8:Aug 75:1710: 11471, of "Behavior of Prestressed Cable Truss Structures", ST8:Aug 74:1627:10747

Foster, James E.
See Phil G. Combs, WW76:Aug 76:232

Fowler, Brian K.
Construction Redesign — Woodstock Rockslide, N.H., GT76:Aug 76:386

Fowler, David W.
See Dwight E. Urelius, ST8:Aug 74:1627:10747

Fowler, Donald E.
See Clifford H. McConnell, Preprint No.2770, Sept 76, 30pp.

Fowler, Pat B.
See Charles W. Warner, Jr., Preprint No.2682, Apr 76, 16pp.

Fox, Arthur J., Jr.
ASCE and Nuclear Power Plants, EI3:July 76:279: 12259
Fox Responds to New York Times Article on New EPA Regs, CE:Feb 76:87
Presidential Address, EI3:July 76:315:12263

Fox, George A.
Are Contractors Treated Fairly?, with Max E. Greenberg, CE:May 75:56
Dsc: Daniel J. Barrows, CE:Aug 75:38; Sidney Zecher, CE:Oct 75:75
TR:141:198
Half a Century Progress in Soft Ground Tunneling, with Louis E. Nicolau, CO4:Dec 76:637:12622

Fox, Gerald F.
Rio-Niteroi Bridge Features Record Girder Span, with H. James Graham, CE:Apr 76:86

Frank, Walter E.
See Kenneth F. Reinschmidt, CO4:Dec 76:615:12610

Franke, Eberhard
Dsc, with Dieter Garbrecht, GT5:May 75:498:11269, of "Behavior of Bored Piles in Sand", GT7:July 74: 749:10651

Franke, Harold H.
Recycling Older Buildings Preserves History, Saves Money, CE:Oct 75:55
TR:141:394

Frankel, Richard J.
See Ely Anthony Rosales Ouano, EE3:June 76:645: 12173

Frankenstein, Guenther E.
Ice Removal From the Walls of Navigation Locks, with James L. Wuebben, H. H.G. Jellinek and R. Yokota, WW76:Aug 76:1487

Franz, Delbert D.
Dsc, HY1:Jan 76:122:11817, of "Implicit Numerical Modeling of Unsteady Flows", HY6:June 75:717: 11378

Dsc, HY12:Dec 76:1782:12586, of "Dimensionless Solution of Dam-Break Flood Waves", HY2:Feb 76:171:11910

Frazier, John B.
Planning Pedestrian Systems for a Prototype New Town in Colombia, BP75:Dec 75:245

Frazier, John W.
Action Program for Elimination of Unethical Practices in the Engagement of Professional Services, EI2:Apr 75:267:11210
TR:141:165

Fread, Danny L.
Flood Routing in Meandering Rivers with Flood Plains, WW76:Aug 76:16
Dsc, HY12:Dec 74:1858:10974, of "Transient Control in Lower Sacramento River", HY3:Mar 74:405:10418
Dsc, HY3:Mar 75:565:11148, of "Comparison of Four Numerical Methods for Flood Routing", HY7:July 74:879:10659
See Zdenek P. Bazant, CE:Oct 76:99
1976 J.C. Stevens Award Presented to Danny L. Fread, CE:Oct 76:104

Fredriksson, A.
See Hakan Stille, NMG:June 76:II-611

Fredsoe, Jorgen
Dsc, HY1:Jan 76:99:11817, of "Sediment Inertia as Cause of River Antidunes", HY2:Feb 75:211:11127

Freedman, Maurice
Greater Lawrence Transportation Improvements Study, Preprint No.2763, Sept 76, 30pp.

Freeland, George L.
Deposition and Erosion in the Dredge Spoil and Other New York Bight Dumping Areas, with George F. Merrill, DIEE:Jan 76:936

Freeman, Clarence N.
Inland Site Location in the Northeast with Emphasis on Water Supply Needs, with John H. Dixon, EFEEC:Aug 75:92
See Eugene O'Brien, Preprint No.2688, Apr 76, 22pp.
See Eugene O'Brien, PO2:Nov 76:195:12574

Freeman, Sigmund A.
Evaluation of an Existing Building Complex for Earthquake Response, ST76:Aug 76:781
See R. Martin Czarnecki, Preprint No.2804, Sept 76, 28pp.

Freese, Simon W.
Freese Lecture is Established, CE:May 76:100

French, Alexander
Transportation Energy Considerations, TE1:Feb 76:27:11919

French, Beth Irons
The Auto Restricted Zone/Multi-User Vehicle Systems Study: A Status Report, with William S. Herald, BP75:Dec 75:197

French, Sid
Single Element Panel for Flat Plate Structures, with Algis P. Kabaila and Victor A. Pulmano, ST9:Sept 75:1801:11553
TR:141:402

French, Thomas J.
See Jerry L. Machemehl, OE75:June 75:142

Frenette, Marcel
Predictions of the Hydraulic and Morphological Changes of the "La Grande Riviere" Lower Reach System, with Octave Caron, WW76:Aug 76:1229

Frenz, Charles M.
Dsc, HY7:July 76:1065:12225, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445

Frere, M. H.
Concepts in the Control of Nonpoint Water Pollution, with David A. Woolhiser, J. H. Caro, B. A. Stewart and W. H. Wischmeier, Preprint No.2667, Apr 76, 24pp.

Friedland, Harold K.
Dsc, CE:Aug 75:113, on Civil Engineering History Gives Valuable Lessons, CE:May 75:48
Dsc, CO2:June 76:412:12160, of "Recommended Standards for the Responsibility, Authority, and Behavior of the Inspector", CO2:June 75:359:11384

Friedman, Y.
See Ilan Amir, IR76:July 76:192

Friedrich, Andrew E.
See Clifford H. McConnell, Preprint No.2770, Sept 76, 30pp.

Frieze, Paul A.
Dsc, ST10:Oct 76:2086:12441, of "Strength of Steel Box-Girder Bridges", ST9:Sept 75:1929:11550

Frind, Emil O.
Gradient Methods in Optimum Structural Design, with Peter M. Wright, ST4:Apr 75:937:11236
TR:141:248

Frisby, D. L.
Materials and Specification for Marine Structures, OE75:June 75:818

Fritz, P.
See K. Kovari, NMG:June 76:II-773

Frobel, Ronald K.
Plastic-Reinforced Asphalt Seepage Barrier, with C. Brent Cluff, IR3:Sept 76:369:12430

Frobenius, Peter
See Edward W. Peterson, SU1:Sept 73:21:10008

Fruh, E. Gus
See Bhaskara R. Penumalli, EE1:Feb 76:191:11946

Fruin, John J.
Designing for the Disadvantaged: Optimum Design Considers All Users, CE:Mar 75:65
TR:141:106
The Role of the Pedestrian, BP75:Dec 75:26

Fry, Zelma B.
See Robert W. Cunny, SM12:Dec 73:1055:10219

Frydman, Sam
Centrifugal Modelling of Riverbank Failure, with D. Huw Beasley, GT5:May 76:395:12099
Yielding of Sand in Plane Strain, GT5:May 74:491:10540
Dsc: James A. Cheney, GT12:Dec 74:1304:10973; Robin N. Chowdhury, GT1:Jan 75:76:11037
Clo: GT9:Sept 75:980:11534
TR:141:43

Fu, Kuan-Chen
Optimum Frame Design Using Available Sections, with Kuang-Wei You, ST76:Aug 76:1049

Fuerst, Michael
Bidding Models: Truths and Comments, CO1:Mar 76:169:11991
Dsc: Matthew Rosenshine, CO4:Dec 76:694:12582; Marvin Gates, CO4:Dec 76:696:12582

Fuertes, Louis A.
Solid Waste Management: Equity Trade-Off Models, with James F. Hudson and David H. Marks, UP2:Nov 74:155:10913

Dsc: Jochen Kuhner and Joseph J. Harrington, UP2:Nov 75:235:11676
Clo: UP1:Aug 76:243:12283
TR:141:71

Fuji-i, Nariaki
See Hakuju Yamaguchi, NMG:June 76:I-183

Fujita, T. Theodore
Old and New Concept of Tornadoes, Preprint No.2784, Sept 76, 10pp.

Fukui, Takuo
See Yoshiji Niwa, NMG:June 76:I-120

Fuller, David R.
See Douglas A. Wilke, CE:May 76:70

Fulton, George P.
Pilot Plant Program — Treatment of NYC Water Supply, with Edward A. Bryant, CE:June 76:52

Fulton, Robert E.
See Ahmed K. Noor, ST4:Apr 75:731:11216

Fulton, Robert L.
Water Resources Planning in Urban Areas, HY9:Sept 75:1249:11571
TR:141:426

Fults, Dan M.
A Practical Monthly Optimum Operations Model, with Lawrence F. Hancock and Glen R. Logan, WR1:Apr 76:63:12063
See Leonard Becker, WR1:Apr 76:101:12062

Fung, Yuan-Cheng B.
1976 Theodore von Karman Medal Presented to Yuan-Cheng B. Fung, CE:Oct 76:99

Funk, Raymond R.
See Joseph W. Fortey, Preprint No.2717, Apr 76, 25pp.

Funkhouser, Donald W.
Skew and Elevated Support Effects on Curved Bridges, with Conrad P. Heins, ST7:July 74:1379:10670
Dsc: John L. Wilson and Sidney Shore, ST2:Feb 75:441:11089; Himat T. Solanki, ST2:Feb 75:443:11089
Clo: ST8:Aug 75:1710:11471
TR:141:68

Furlong, Richard W.
Concrete Encased Steel Columns—Design Tables, ST9:Sept 74:1865:10807
Dsc: Russell Q. Bridge and Kuldeep S. Virdi, ST8:Aug 75:1716:11471
Clo: ST1:Jan 76:292:11819
TR:141:92

Furumoto, Augustine S.
See George T. Taoka, ST2:Feb 74:305:10336

Futagami, Tanehiro
FEM Coupled with LP for Water Pollution Control, with Nobuyuki Tamai and Mashio Yatsuzuka, HY7:July 76:881:12244

Gabrielsen, Bernard L.
Resistance of Masonry Infill Walls to Out-of-Plane Dynamic Motion, with Kenneth Kaplan, Preprint No.2771, Sept 76, 26pp.

Gade, Richard H.
Recent Aerodynamic Studies of Long-Span Bridges, with Harold R. Bosch and Walter Podolny, Jr., ST7:July 76:1299:12233

Gagnon, Claude R.
Computer Simulation of Water Distribution Networks, with Samuel L.S. Jacoby, TE3:Aug 75:553:11515
TR:141:363

Gahan, Lawrence W.
See David W. York, TN: WR2:Nov 76:409:12577

Gaither, William S.
Development of the Continental Shelf, Preprint No.2813, Sept 76, 9pp.
See Harry Rood, OE75:June 75:58

Galambos, Theodore V.
History of Steel Beam Design, Preprint No.2776, Sept 76, 21pp.
See Dale G. Eyre, ST5:May 76:935:12101

Galay, Victor J.
See Thomas Blench, WW76:Aug 76:1363

Galil, Noah
See Yerachmiel Argaman, EE5:Oct 75:703:11639

Gallagher, Brian J.
See Raymond J. Krizek, EE2:Apr 76:389:12040

Gallagher, Richard C.
Los Angeles Pioneers Separate Busway, CE:Jan 75:64
TR:141:21

Gallagher, Richard H.
Finite Element Structural Analysis, An Overview, Preprint No.2765, Sept 76, 28pp.
See Der-Liang Young, EM1:Feb 76:1:11903
See Der-Liang Young, EM6:Dec 76:1009:12643
See John F. Grosskurth, Jr., EM6:Dec 76:1025:12641

Gallaway, Bob M.
See Don Saylak, TE1:Feb 75:97:11106

Galler, William S.
See Harold B. Gotaas, EE6:Dec 73:831:10191

Gambrell, Robert P.
Physicochemical Parameters that Regulate Mobilization and Immobilization of Toxic Heavy Metals, with Rashid A. Khalid and W. H. Patrick, Jr., DIEE:Jan 76:418

Gambrell, Samuel C., Jr.
See Terry R. Douglas, EM5:Oct 74:991:10871

Gammon, M. A.
See Fletcher H. Griffis, TE2:May 76:313:12137

Ganeswaran, Rajathurai
Dsc, with Ananthakrishnan Sundar, HY11:Nov 75:1453:11672, of "Hydrology of Porous Pavement Parking Lots", HY12:Dec 74:1739:11010

Gangadharaiah, Chinappa
See George I.N. Rozvany, EM6:Dec 75:755:11797

GangaRao, Hota V.S.
Macroapproach for Ribbed and Grid Plate Systems, with Amr Abd Elmeged and Virendra K. Chaudhary, EM1:Feb 75:25:11130
Dsc: Donald L. Dean, EM5:Oct 75:720:11598
Clo: EM2:Apr 76:369:12012
TR:141:177

Gangstad, Edward O.
Vegetative Management of Water Hyacinths, WW76:Aug 76:672
See Thomas R. Bartley, IR3:Sept 74:231:10810

Ganguly, Jagadish C.
See Amitabha Ghosal, CO4:Dec 74:631:11034

Garbe, Carl W.
Hydraulic Dredge Spoil for Land Reclamation, with Kuei-wu Tsai, Preprint No.2678, Apr 76, 24pp.

Garber, William F.
Energy-Wastewater Treatment and Solids Disposal, with George T. Ohara and Sagar K. Raksit, EE3: June 75:319:11357
TR:141:313

Garbrecht, Dieter
See Eberhard Franke, GT5:May 75:498:11269

Garde, Ramchandra J.
See Dharam V. Varshney, HY8:Aug 75:1053:11513

Gardner, Christopher A.
Shaft Failure of Large Axial Flow Pumps, with Howard T. Hill, PO2:Nov 76:209:12575

Gardner, William S.
See James K. Mitchell, GT75:June 75:II-279

Garrett, Michael R.
Methodology for Sedimentation and Water Quality Modelling at the Humber River Mouth, with A. Harrington, Nicholas Kouwen, A. F. Roake and Paul E. Wisner, WW76:Aug 76:650

Garrison, C. J.
Drag and Inertia Coefficients in Oscillatory Flow About Cylinders, Preprint No.2693, Apr 76, 24pp.
Wave Forces on Bottom-Mounted Large-Diameter Cylinder, with Frederick H. Gehrman and Brian T. Perkinson, WW4:Nov 75:343:11699
Dsc: Suphat Vongvisessomjai, WW4:Nov 76:484:12512
TR:141:458

Garson, Robert C.
Tornado Design Winds Based on Risk, with Jose Maria Catalan and C. Allin Cornell, ST9:Sept 75:1883:11559
TR:141:411

Garyet, Dean
Converting Solar Energy to Hydrogen: Answer to U.S.'s Long-Range Energy Needs?, CE:Jan 76:63
Dsc: Robert H. Griffin, CE:May 76:24; Oliver H. Briggs, Jr., CE:May 76:24; Thomas A. Nelson, CE:May 76:24; Morton I. Goldman, CE:May 76:28
TR:141:513

Gaskin, Paul N.
Contribution to Selection of Railroad Ballast, with Gerald P. Raymond, TE2:May 76:377:12134

Gates, James H.
California's Seismic Design Criteria for Bridges, ST12:Dec 76:2301:12636

Gates, Marvin
Conceptual RMC/Time Synthesis, with Amerigo Scarpa, CO2:June 76:307:12181
Formula for Markup for Profit, with Amerigo Scarpa, TN: CO4:Dec 76:685:12590
Gates' Bidding Model—A Monte Carlo Experiment, CO4:Dec 76:669:12631
Learning and Experience Curves, with Amerigo Scarpa, CO1:Mar 72:79:8778
Errata: CO4:Dec 76:689:12582
TR:138:232
Optimum Size of Equipment, with Amerigo Scarpa, CO4:Dec 75:861:11772
TR:141:503
Optimum Size of Hauling Units, with Amerigo Scarpa, CO4:Dec 75:853:11771
TR:141:503
Dsc, with Amerigo Scarpa, CO3:Sept 76:573:12362, of "Earthwork Volumes by Contour Method", CO1:Mar 76:131:11977
Dsc, CO4:Dec 76:691:12582, of "LOMARK: A Bidding Strategy", CO1:Mar 76:197:11961
Dsc, CO4:Dec 76:696:12582, of "Bidding Models: Truths and Comments", CO1:Mar 76:169:11991

Gates, William E.
See Walter M. Grayman, HY5:May 75:567:11327

Gaum, Carl H.
The Goals of Water Resources Planning and Management, Preprint No.2719, Apr 76, 17pp.

Gavarini, Carlo
See Giulio Ceradini, ST10:Oct 75:2015:11618

Gawronski, Wlodzimierz
Dsc, ST11:Nov 76:2247:12510, of "Free Vibration Analysis Using Substructuring", ST12:Dec 75:2627:11788

Gazetas, George C.
Forced Vibrations of Strip Footings on Layered Soils, with Jose M. Roesset, ST76:Aug 76:115

Gear, Roy D.
Effects of Irrigation Scheduling and Coordinated Delivery on Irrigation and Drainage Systems, with Arnold S. Dransfield and Melvin D. Campbell, Preprint No.2720, Apr 76, 18pp.

Gebert, David K.
See Donn E. Hancher, CO4:Dec 76:629:12606

Gebhart, Glen E.
Effects of Destratification on Depth Distribution of Fish, with Robert C. Summerfelt, EE6:Dec 76:1215:12608

Gedney, David S.
Reinforced Earth: A New Alternative for Earth Retention Structures, with David P. McKittrick, CE:Oct 75:58
TR:141:399

Gee, D. Michael
Bed Form Response to Nonsteady Flows, HY3:Mar 75:437:11195
TR:141:277

Gee, William R.
A Study to Predict the Release of Metals from Hydraulically Dredged Material, with Robert W. George, John P. Hewitt and Kenneth B. Kim, WW76:Aug 76:492

Geertsma, Jan
Numerical Treatment of Some Geomechanical Problem Areas in Oil and Natural Gas Production, NMG:June 76:II-759

Gehner, Claus D.
See Jerry B. Schneider, TE4:Nov 74:943:10936

Gehrman, Frederick H.
See C. J. Garrison, WW4:Nov 75:343:11699

Geiger, David H.
Largest and Lightest Fabric Roof to Date, CE:Nov 75:82
TR:141:473

Gelhar, Lynn W.
Dsc, with John L. Wilson and Michael A. Collins, EM5:Oct 75:718:11598, of "Radial Dispersion in Ground-Water Flow", EM6:Dec 74:1117:10998

Gellert, Menachem
See Ari Danay, ST12:Dec 75:2505:11761

Gemmell, Robert S.
See Barry J. Adams, HY7:July 75:989:11450

George, P.
Design of Piles for Deep Water Offshore Structures, with Ian M. Smith, NMG:June 76:I-419

George, Robert W.
See William R. Gee, WW76:Aug 76:492

Ger, Ahmed M.
Comparison of Single-Point Injections in Pipe Flow, with Edward R. Holley, HY6:June 76:731:12172

Gerard, Robert
Dsc, EM3:June 76:581:12162, of "Turbulent Structure near Smooth Boundary", EM3:June 75: 241:11372

Gerba, Charles P.
Fate of Wastewater Bacteria and Viruses in Soil, with Craig Wallis and Joseph L. Melnick, IR3:Sept 75: 157:11572
TR:141:479

Gerbault, Marcel
See Everald V. Wright, Preprint No.2675, Apr 76, 21pp.

Gere, James M.
See Barry J. Goodno, ST1:Jan 76:267:11837
See Barry J. Goodno, ST5:May 76:973:12105

Gergely, Peter
See Rafael Jimenez, ST76:Aug 76:457

Gerhold, W. F.
See E. Escalante, Preprint No.2733, Apr 76, 22pp.

Gerritsen, Franciscus
See Per Moller Bruun, WW4:Nov 74:389:10903

Gerry, G.
See Walter Stensch, ST4:Apr 75:795:11222

Gersch, Will
Structural System Parameter Estimation by Two-Stage Least Squares Method, with George T. Taoka and Robert Liu, EM5:Oct 76:883:12464

Gerwick, Ben C., Jr.
Civil Engineering and Offshore Construction, Preprint No.2753, Sept 76, 6pp.
Condeep—In 400 Ft of Water, Concrete Caisson Requires No Piles, CE:Apr 76:54
Seismic Design of Offshore Concrete Structures, with Shighero Watanabe, Preprint No.2729, Apr 76, 8pp.
Dsc, CE:July 76:36, on Concrete Barge of First Totally Offshore LPG Facility, CE:Apr 76:58

Geschwindner, Louis F.
See Harry H. West, ST11:Nov 75:2277:11712

Gesund, Hans
See Ashok K. Chugh, ST11:Nov 75:2405:11738

Ghahraman, David
Analysis of Metered Taxi Fares, with Tung Au and Dwight M.B. Baumann, TE4:Nov 75:807:11735
TR:141:489

Ghali, Amin
Displacements and Losses in Multistage Prestressed Members, with Romy G. Sisodiya and Gamil S. Tadros, ST11:Nov 74:2307:10968
Dsc: Venkata Narasimharao Tanniru, ST5:May 76:1151:12093
Clo: ST11:Nov 76:2233:12510
TR:141:125
See Sidney H. Simmonds, ST1:Jan 76:109:11853
See Walter H. Dilger, CO1:Mar 76:239:11964
See Walter H. Dilger, CE:Oct 76:97

Ghazzaly, Osman I.
Stability of Offshore Pipe in Cohesive Sediment, with Leland M. Kraft, Jr. and S. J. Lim, OE75:June 75: 490

Ghosal, Amitabha
Hardinge Bridge Span Repair, with Jagadish C. Ganguly, Himangsu K. Banerjee and Mahesh P. Kapoor, CO4:Dec 74:631:11034
Dsc: David Allen, CO3:Sept 75:678:11533
Errata: CO2:June 75:456:11336
Clo: CO1:Mar 76:257:11948
TR:141:135

Ghosh, Mriganka M.
Physicochemical Approach to Water and Wastewater Filtration, with Thomas A. Jordan and Ronald L. Porter, EE1:Feb 75:71:11120
Dsc: Joseph A. FitzPatrick, EE1:Feb 76:217: 11876
TR:141:238

Ghosh, Ram Kinkar
Gap-Graded Concrete for Paving Construction, with Mukul Ranjan Chatterjee, CO1:Mar 76:227:11988

Ghosh, Ram S.
See J. Neil Mustard, CO4:Dec 74:507:10994

Ghosh, S. N.
Dsc, HY6:June 76:802:12164, of "Boundary Shear in Channel with Flood Plain", HY7:July 75:933:11452

Ghosh, Sanjib K.
Dsc, SU1:Oct 75:153:11602, of "New Procedure for Numerical Relative Orientation", SU2:Nov 74:155: 10962

Gibbs, Albert E.
See William L. Lane, Preprint No.2684, Apr 76, 26pp.

Gibbs, Phil Q.
Availability of Water for Coal Conversion, WR2:Nov 76:219:12540

Gibbs, William R.
William R. Gibbs Nominated for ASCE President-Elect, CE:July 76:86
William R. Gibbs President-Elect of ASCE for 1977, CE:Sept 76:106
William R. Gibbs Takes Office in Philadelphia, CE: Oct 76:91

Gientke, Fred J.
Transient Control in Lower Sacramento River, HY3: Mar 74:405:10418
Dsc: Danny L. Fread, HY12:Dec 74:1858:10974; Ben Chie Yen and Ahmet Suha Sevuk, HY2: Feb 75:317:11088
Clo: HY8:Aug 75:1097:11470
TR:141:46

Giese, Egon
Stability Problems for the Navigation Channel in a Tidal River, WW76:Aug 76:280

Giessner, William R.
Planning and Control of Combined Sewerage Systems, with Robert T. Cockburn, Frank H. Moss, Jr. and Mark E. Noonan, EE4:Aug 74:1013:10744
TR:141:5
1976 Wesley W. Horner Award Presented, with Robert T. Cockburn, Frank H. Moss, Jr. and Mark E. Noonan, CE:Oct 76:101

Giger, Max W.
Stability of Vertical Corner Cut with Concentrated Surcharge Load, with Raymond J. Krizek, GT1:Jan 76:31:11842
Dsc: Mohsen M. Baligh and Amr S. Azzouz, GT12:Dec 76:1286:12585

Gilbert, Gorman
Engineering of Public Systems, with Jarir S. Dajani, EI1:Jan 75:15:11068
Dsc: Ashok N. Shahane, EI1:Jan 76:145:11815
Errata: EI2:Apr 76:269:12011
Clo: EI4:Oct 76:481:12437
TR:141:100
See Jarir S. Dajani, UP1:May 75:49:11316

Gilbert, Walter G.
Dsc, with James O. Bryant, Jr., EE2:Apr 75:273: 11205, of "Recommendations for Environmental Engineering Education", EE2:Apr 74:243:10459

Gilcrease, Edward E., Jr.
Rail Transit Operating Cost Guidelines, with Walter Kudlick and Manuel Padron, TE2:May 75:365: 11314
TR:141:228

Giles, Kenneth T.
See Grant S. Anderson, CE:Mar 75:78

Gill, James D.
Foundation of the Sirikit Powerhouse, with Leib Wolofsky, GT76:Aug 76:82

Gill, Mohammad Akram
Exact Solution of Gradually Varied Flow, HY9:Sept 76:1353:12406
Oscillations in Surge Tanks, HY10:Oct 74:1369: 10891
Dsc: C. R. Rao, HY9:Sept 75:1284:11535; John Pickford, HY9:Sept 75:1286:11535
TR:141:145
Dsc, HY9:Sept 76:1405:12364, of "Numerical Errors in Water Profile Computation", HY11:Nov 75: 1389:11694
Dsc, CE:Oct 76:30, on Inverted Filter Stabilizes Soil, Stops Erosion, CE:Apr 76:78

Gillean, James I.
See Robert M. Clark, EE1:Feb 74:7:10316

Gillespie, James W.
James W. Gillespie Takes Office in Philadelphia, CE: Oct 76:93

Gilligan, John A.
See Ralph D. Webb, CO4:Dec 75:785:11753

Gilman, Harold D.
Dsc, HY1:Jan 76:11817, of "ASCE Urban Water Resources Research Program", HY7:July 75:847: 11445

Gilmor, Michael I.
See Eddie Y.L. Chien, EI2:Apr 75:165:11261

Gimbutas, Jurgis
Dsc, CE:Feb 76:34, on News in Bridge Decks, CE: Aug 75:60

Gimsing, Niels J.
Multispan Stayed Girder Bridges, ST10:Oct 76:1989: 12470

Ginzton, Artemas
Poor Parking — Detrimental to Bicycling Growth, BP75:Dec 75:300

Gioncu, Victor
Dsc, ST7:July 76:1512:12226, of "Stability of Hyperboloidal Shells", ST7:July 75:1585:11446
Dsc, ST7:July 76:1518:12226, of "Reinforced Concrete Hyperbolic Paraboloid Shells", ST9:Sept 75:1961:11595

Gipe, George W.
See Yishu Chiu, TN: EE6:Dec 76:1285:12638

Gladwell, John S.
Planning Water Resources Research Programs, WR1: Apr 76:3:12072

Glaser, Peter E.
New Sources of Power—Solar Energy, EI4:Oct 75: 461:11661
TR:141:477

Glazik, John L., Jr.
See Zdenek P. Bazant, EM3:June 76:479:12220

Glenn, Andrew J.
See Ralph E. Brown, GT10:Oct 76:1059:12498

Glenn, J. Harlan
See Arlo W. Fast, EE6:Dec 76:1175:12629

Glennon, John C.
Access Control on Arterial Highways, with Jamil A. Azzeh, TE1:Feb 76:75:11912

Gleser, Sol M.
Dsc, GT12:Dec 76:1288:12585, of "Full-Scale Lateral Load Tests of Pile Groups", GT1:Jan 76:87:11849

Glodowski, C. W.
See W. F. Baird, OE75:June 75:1104

Glover, Robert E.
South Platte River Flow Correlations, IR3:Sept 75: 175:11563
TR:141:424

Gluck, Jacob
See Ari Danay, ST12:Dec 75:2505:11761

Goble, George G.
Practical Applications of Structural Optimization, with Fred Moses, ST4:Apr 75:635:11267
TR:141:274

Goddard, James E.
Dsc, HY5:May 76:687:12092, of "ASCE Urban Water Resources Research Program", HY7:July 75: 847:11445

Godden, William G.
See Mohammad Aslam, EM3:June 75:207:11366

Godfrey, Kneeland A., Jr.
Computerized Traffic Signals; Good for My City?, CE:Nov 75:76
TR:141:469
Employee Benefits, CE:Jan 75:76
TR:141:37
Energy Conservation in Existing Buildings, CE:Sept 75:79
Dsc: Carl Olm, CE:July 76:28; Joseph A. Kleine-Kracht, CE:Sept 76:30
TR:141:360
Interstate Highway System, CE:Mar 75:51
Dsc: Warren E. Howland, CE:May 75:20; Alfred A. Siess, Jr., CE:July 75:30
Errata: CE:Sept 75:30
TR:141:90
Is There Anything to 'Encounter Groups'?, CE:Jan 76:67
Los Angeles Tackles Freeway Congestion, CE:Sept 75:96
TR:141:379
News in Bridge Decks, CE:Aug 75:60
Dsc: Henry W. Derthick, CE:Nov 75:24; Jurgis Gimbutas, CE:Feb 76:34; James C. Porter, CE: Mar 76:30; Henry W. Derthick, CE:Apr 76:36
TR:141:322
Recycling Refuse Into Energy, CE:Sept 76:86
Regulations—Boon or Bane?, CE:Dec 76:73
Short Span Bridges, CE:July 75:42
Dsc: Dean C. Thomas, CE:Oct 75:32; Howard E. Blower, CE:Oct 75:35; Henry Hein, Jr., CE:Nov 75:24; James C. Porter, CE:Mar 76:30
TR:141:267
The Three Ages of Philadelphia, CE:July 76:44
Errata: CE:Oct 76:30
Unemployment, Public Works, and the 1976 Presidential Election Campaign, CE:Oct 76:82
Urban Freeways and Changing Social Values, CE: May 75:80
Dsc: Name withheld, CE:Sept 75:31; John O'Malley, CE:Apr 76:40
TR:141:231

Godwin, B. C.
Challenges in Disposal of Dredged Material, Preprint No.2648, Apr 76, 13pp.

Goedert, Jeanne
See Thomas N. Yancey, Jr., WR2:Nov 76:265:12564

Goel, Surendra K.
See David L.C. Lo, ST7:July 75:1443:11410

Gohil, Mahendrasinhji M.
See Kenneth W. Karren, ST1:Jan 75:187:11067

Goia, Ioan A.
See Mihai C. Tofan, EM5:Oct 76:938:12438

Goldberg, Alfred
Seismic Design of Non-Structural Building Systems, Preprint No.2756, Sept 76, 14pp.

Goldberg, Eugene H.
See Louis Cantor, CO4:Dec 75:923:11767

Goldberg, John E.
Analysis of Moderately Thick Shells of Revolution, with Yu-Kuang Tang and Divaker V. Pathak, ST4: Apr 75:821:11235
TR:141:246
1976 Nathan M. Newmark Medal Presented to John E. Goldberg, CE:Oct 76:99

Goldberg, Michael B.
See Vincent H. Chu, HY9:Sept 74:1203:10805

Goldbloom, Joseph
Recommended Standards for the Responsibility, Authority, and Behavior of the Inspector, CO2:June 75:359:11384
Dsc: Lewis H. Tuthill, CO2:June 76:411:12160; Harold K. Friedland, CO2:June 76:412:12160
TR:141:303

Golden, Dean M.
Coastal Power Plant Heat Disposal Considerations, EE3:June 75:365:11359
TR:141:328
See Robert E. Heightchew, Jr., CE:Oct 76:102

Golder, Hugh Q.
Dsc, EI3:July 76:400:12223, of "Karl Terzaghi and the Chicago Subway", EI4:Oct 75:477:11668

Goldhaber, Stanley
The Systems Approach and Construction Management, PROD:Aug 76:71

Goldman, Joel C.
Nutrient Transformations in Mass Cultures of Marine Algae , with John H. Ryther, EE3:June 75:351: 11358
TR:141:321

Goldman, Morton I.
Dsc, CE:May 76:28, on Converting Solar Energy to Hydrogen: Answer to U.S.'s Long-Range Energy Needs?, CE:Jan 76:63

Goldschmidt, Gunther
Wet-Wells Volumes for Multipump Systems, IR3:Sept 74:371:10830
Errata: IR3:Sept 75:247:11536
TR:141:215

Goldsmith, Victor M.
See John S. Fisher, OE75:June 75:161

Goldsmith, Werner
Construction Helmet Response Under Severe Impact, CO2:June 75:335:11349
TR:141:261

Goldstein, Arnold A.
County Planning for Suburban Growth Management, Preprint No.2817, Sept 76, 17pp.

Gole, Chintaman V.
Dsc, with Zal S. Tarapore, Shashikant B. Brahme and Ulhas V. Purandare, WW4:Nov 74:411:10903, of "Regime Equations and Tidal Inlets", WW3:Aug 73:393:9952

Golley, Bruce W.
Investigation of Dynamic Taping, with John Sneddon, SU2:Nov 74:115:10938
Errata: SU1:Oct 75:151:11602
TR:141:74
Rectangular Finite Element for Field Problems, EM3: June 76:431:12175

Golze, Alfred R.
Alfred R. Golze Elected to Honorary Membership, CE:Oct 76:95
Planning the Tehachapi Crossing, HY1:Jan 75:1: 11052
TR:141:183

Goodell, Robert G.B.
See Vincent D. Paul, Preprint No.2681, Apr 76, 12pp.

Goodkind, Michael N.
Conglomerate Takeover of Consulting Firms: An Opinion, CE:Sept 75:111
Dsc: Cranston R. Rogers, CE:Mar 76:22
Is There Price Collusion in the Civil Engineering Profession?, EI3:July 76:301:12258

Goodman, Alvin S.
Civil and Environmental Engineering Aspects of Energy Complexes, EFEEC:Aug 75
Education and Training in Water Resources Planning, WR2:Nov 76:209:12555
Objectives of Conference on Energy Complexes, EFEEC:Aug 75:1

Goodman, James R.
See Vijaya K.A. Gopu, ST12:Dec 75:2609:11794
See Erik G. Thompson, ST12:Dec 75:2659:11802

Goodman, Joel M.
See Jared L. Black, OE75:June 75:846

Goodno, Barry J.
Analysis of Shear Cores Using Superelements, with James M. Gere, ST1:Jan 76:267:11837
Earthquake Behavior of Suspended-Floor Buildings, with James M. Gere, ST5:May 76:973:12105

Goodrich, Ronald
Pedestrian Behavior: A Study of the Organization of Co-Active Behavior, BP75:Dec 75:374

Goodspeed, Charles H.
Conditioning of Structural Flexibility Matrix, with Michael J. Martin, ST8:Aug 74:1677:10763
Dsc: A. C. Cassell, ST7:July 75:1620:11401
TR:141:80
See Roberta H. Ewald, EI2:Apr 75:175:11228

Gopalacharyulu, S.
See Bellur S. Ramachandra Rao, EM1:Feb 76:19: 11920

Gopalacharyulu, S.
Cantilever Cylindrical Shells Under Assumed Wind Pressures, with David J. Johns, EM5:Oct 73:943: 10085
Dsc: Venkata Narasimharao Tanniru, EM6:Dec 74:1259:10972
Clo: EM4:Aug 75:488:11468
TR:141:30

Gopalakrishnan, Krishnamurthy
Dsc, HY11:Nov 74:1729:10898, of "Developing Region in Self-Aerated Flows", HY4:Apr 74:553: 10501

Gopala Krishnayya, Abbanki V.
Behavior of Compacted Soil in Tension, with Zdenek Eisenstein and Norbert R. Morgenstern, GT9:Sept 74:1051:10828
Dsc: Santiago Uriel and Fernando Mier, GT6: June 75:596:11339; Richard H.G. Parry and Arif Ajaz, GT6:June 75:599:11339; Raymond K. Moore, GT9:Sept 75:985:11534; Hsai-Yang Fang and William L. Deutsch, GT5:May 76: 569:12091
Clo: GT9:Sept 76:1021:12363
TR:141:134

Gopfert, Wolfgang M.
Simultaneous Geodimeter and Tellurometer Distances, SU1:Oct 75:89:11623
TR:141:173

Gopu, Vijaya K.A.
Full-Scale Tests on Tapered and Curved Glulam Beams, with James R. Goodman, ST12:Dec 75: 2609:11794
TR:141:507

Gordon, Bernard B.
Dsc, GT75:June 75:II-37, of "Field Measurement of Permeability in Soil and Rock", GT75:June 75:II-3

Gorlov, Alexander M.
A Numerical Method of Analysis of Foundation Plates, NMG:June 76:III-1371

Gorman, C. Thomas
Dsc, with Vincent P. Drnevich and Thomas C. Hopkins, GT75:June 75:II-139, of "Measurement of In Situ Strength", GT75:June 75:II-57

Gorzynski, James W.
Variable Energy Ratio Method for Structural Design, with William A. Thornton, ST4:Apr 75:973:11266
TR:141:271

Gossen, Paul A.
Plastic Tower Solves Radar Interference, with Richard L. Tomasetti, CE:Dec 76:46

Goswami, Santosh R.
Dsc, EE2:Apr 76:492:12010, of "Water Supplies for Low-Income Communities in Developing Countries", EE5:Oct 75:687:11608
Dsc, with Ben C. Wester, EE6:Dec 76:1307:12583, of "Sanitary Landfill Leachates and Their Leachate Treatment", EE2:Apr 76:411:12033

Gotaas, Harold B.
Design Optimization for Biological Filter Models, with William S. Galler, EE6:Dec 73:831:10191
Dsc: John M. Baker and Quintin B. Graves, EE5: Oct 74:1190:10836; William C. Pisano and Joseph J. Harrington, EE1:Feb 75:167:11085
Clo: EE5:Oct 75:847:11596
TR:141:17

Gotz, Werner
Dsc, HY12:Dec 76:1771:12586, of "Shear Distribution in Bends in Rectangular Channels", HY8:Aug 75:1053:11513

Goughnor, Roger D.
See Ronald G. Chassie, CE:Apr 76:65

Gould, Michael S.
Dsc, with Raymond F. Drnevich, EE5:Oct 76:1127: 12436, of "Temperature Effects on Aerobic Digestion Kinetics", EE5:Oct 75:795:11646

Gould, Phillip L.
Column Supported Cylindrical-Conical Tanks, with Subir K. Sen, Robert S.C. Wang, Herman Suryoutomo and Richard D. Lowrey, ST2:Feb 76: 429:11927
Dsc, EM1:Feb 75:88:11086, of "Membrane Solutions for Shells with Edge Constraint", EM3:June 74: 497:10605
See Heinrich Stallbohm, ASCE1:Jan 76:303:11819
See Altay Cataloglu, EM1:Feb 76:135:11924

Gouwens, Albert J.
Dsc, ST10:Oct 76:2099:12441, of "Column Design by P Delta Method", ST2:Feb 76:411:11936

Govatos, George C.
Social Responsibility Within the Present Code of Ethics, EI3:July 75:351:11412
TR:141:347

Gowda, Tagadur P. Halappa
Dsc, EE2:Apr 75:283:11205, of "Simulation of Water Quality in Tarawera River", EE2:Apr 74:369:10461

Graber, S. David
Dsc, EE5:Oct 75:866:11596, of "Boundary Layer Separation Concept of Settling Tanks", EE6:Dec 74:1213:11019

Grabske, William J.
Planning and Implementation of the Chestnut Street Transitway, with Richard K. Faris, Preprint No.2803, Sept 76, 23pp.

Grace, Robert A.
Non-Breaking and Breaking Wave Forces on Pipelines, with Joseph Castiel, OE75:June 75:523
Dsc, WW3:Aug 75:305:11473, of "Wave Forces on Cylinders Near Plane Boundary", WW4:Nov 74: 345:10944

Grady, C. P. Leslie, Jr.
See Ralph E. Roper, Jr., EE4:Aug 74:1048:10693
See Michael D. Mynhier, EE5:Oct 75:829:11659
See Arthur R. Tarrer, EE3:June 76:657:12207

Graf, Walter H.
Manning's Roughness for Artificial Grasses, with V. Heang Chhun, IR4:Dec 76:413:12603
See Oner Yucel, HY7:July 75:947:11453
See Arthur W. Brune, HY12:Dec 75:1519:11801

Graff, Donald R.
Dsc, SU1:Oct 75:155:11602, of "New Procedure for Numerical Relative Orientation", SU2:Nov 74:155: 10962

Graff, William J.
See Ray R. Ayers, ST76:Aug 76:439

Graham, H. James
See Gerald F. Fox, CE:Apr 76:86

Graham, James R.
Half Century of USBR Arch Dam Construction, with James Legas and Ernest A. Lindholm, CO2:June 75:281:11387
TR:141:310

Granju, Jean-Pierre
Effect of Flow Regulation on Navigation Fuel Costs, with Walter O. Wunderlich, WW76:Aug 76:65

Grant, Rebecca
Differential Settlement of Buildings, with John T. Christian and Erik H. Vanmarcke, GT9:Sept 74: 973:10802
Dsc: Gerald A. Leonards, GT7:July 75:700:11398; Rene-Jacques Bally, GT9:Sept 75:981:11534
Clo: GT3:Mar 76:257:11949
TR:141:117

Grant, William D.
Dsc, WW4:Nov 75:466:11677, of "Friction Factor under Oscillatory Waves", WW2:May 75:135:11292

Grantham, George R.
Water Quality Planning Strategy, with Thomas E. Bailey, WR1:Apr 76:11:12060

Grass, Luther B.
Deterioration of Concrete Ditch Liners in Saline-Alkali Soil, with Paul Koluvek, IR4:Dec 74:477:10997
Dsc: Carl R. Wilder, IR4:Dec 75:318:11745
TR:141:289

Graves, Quintin B.
See John M. Baker, EE5:Oct 74:1190:10836

Gray, Donald H.
Dsc, with Barry Bevier and Frank Somogyi, GT1:Jan 76:117:11816, of "Effects of Deforestation of Slopes", GT2:Feb 75:147:11141
Dsc, GT1:Jan 76:119:11816, of "Electro-Osmosis Applied to Unstable Embankment", GT8:Aug 75:733:11495

Gray, Hamilton
Dsc, with Charles A. Moore, EE1:Feb 76:229:11876, of "Control of Gas Flow from Sanitary Landfills", EE4:Aug 75:555:11525

Grayman, Walter M.
Land-Based Modeling System for Water Quality Management Studies, with Richard M. Males, William E. Gates and A. W. Hadder, HY5:May 75:567:11327
TR:141:316

Graze, Harald R.
See Robert J. Shipton, HY9:Sept 76:1343:12414

Grecco, William L.
Identifying Your Client, with Thomas A. Dames, EI4:Oct 75:485:11663
Errata: EI4:Oct 76:482:12437
TR:141:487

Green, J. Craig
See William C. Taggart, EE3:June 75:465:11337

Green, Roger
Post-Tensioned Slab Bridges on Isolated Supports, ST1:Jan 75:233:11065
TR:141:172

Greenberg, Max E.
Role of Contract and Specifications in Foundations Construction, CO2:June 74:113:10607
Dsc: Ronald M. Grider, CO1:Mar 75:228:11147; Charles B. Molineaux, CO1:Mar 75:229:11147
Errata: CO4:Dec 74:658:10970
Clo: CO3:Sept 75:665:11533
TR:141:28
See George A. Fox, CE:May 75:56

Greenkorn, Robert A.
See Surendra P. Gupta, EE1:Feb 76:87:11901

Greenstein, Jacob
Rutting Failure in Full-Depth Asphalt Pavement, with Moshe Livneh, TE4:Nov 75:737:11690
TR:141:372
Transition Curves for Speed Changes, TE4:Nov 76:699:12525

Gregersen, Odd S.
Use of Vane Shear Test for Determining the Undrained Shear Strength of Clays, GT75:June 75:II-141
Dsc, GT75:June 75:II-141, of "Measurement of In Situ Strength", GT75:June 75:II-57

Gregory, Constantine J.
See William P. Darby, EE3:June 74:577:10577

Greimann, Lowell F.
See Max L. Porter, ST12:Dec 76:2255:12611

Gren, Gail G.
Hydraulic Dredges, Including Boosters, DIEE:Jan 76:115

Grenney, William J.
Estimating Flow Conditions for River Models, with David S. Bowles, EE4:Aug 76:693:12297
See A. Bruce Bishop, EE5:Oct 76:1071:12452

Greulich, Gunther
Research Activity and Needs in Engineering Surveying, SU1:Oct 75:65:11610
TR:141:144

Greve, Norman R.
Computer Pricing Policy and Methods, EI4:Oct 76:437:12505
Computer Usage and Pricing Alternatives for Consultants, EI2:Apr 75:93:11237
TR:141:222
See James P. Cassidy, ST76:Aug 76:884

Grider, Ronald M.
Dsc, CO4:Dec 74:653:10970, of "Basic Construction Principles in Higher Latitudes", CO1:Mar 74:33:10399
Dsc, CO1:Mar 75:228:11147, of "Role of Contract and Specifications in Foundations Construction", CO2:June 74:113:10607

Griffin, George M.
Dredge-Fill in the Coral Reef Tract of the Northern Florida Keys, DIEE:Jan 76:768

Griffin, Owen M.
See Richard A. Skop, OE75:June 75:535

Griffin, Richard E.
Micro-Climate Control of Deciduous Fruit Production with Overhead Sprinklers, IR76:July 76:278

Griffin, Robert H.
Dsc, CE:May 76:24, on Converting Solar Energy to Hydrogen: Answer to U.S.'s Long-Range Energy Needs?, CE:Jan 76:63

Griffis, Fletcher H.
Airport Upgrading Versus Landing Gear Optimization, with M. A. Gammon, TE2:May 76:313:12137
On Bidding—A Dynamic Model with One Competitor, Preprint No.2709, Apr 76, 28pp.
See Robert M. Meccia, WW1:Feb 75:1:11096

Griffith, Alvin R.
See Subhash C. Anand, EM5:Oct 73:927:10063

Grigg, Neil S.
Development of Storm Drainage Cost Functions, with John P. O'Hearn, HY4:Apr 76:515:12069
Evaluation and Implementation of Urban Drainage Projects, UP1:May 75:61:11324
TR:141:279
Interactive Simulation for Water System Dynamics, with Maurice C. Bryson, UP1:May 75:77:11313
TR:141:223
Dsc, HY3:Mar 76:444:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445
See John W. Labadie, EE1:Feb 75:27:11115
See Harry G. Wenzel, Jr., WR1:Apr 76:117:12070

Grima, A. P.
Public Participation in Great Lakes Water Levels Regulation: Further Findings from the Public Hearing Held by the I.J.C. in 1973, with C. Dufournaud, IR76:July 76:418

Grimm, Alfred
See Otto Vydra, CE:Dec 76:55

Grimm, Clayford T.
Brick Masonry Shells, ST1:Jan 75:79:11050
Dsc: Koksal Anadol and Ersin Arioglu, ST11:Nov 75:2451:11675
Clo: ST5:May 76:1163:12093
TR:141:158

Building and Operating Costs Versus Rental Income, EI3:July 76:355:12270
Civil Engineering Esthetics—State-of-the-Art, with Wolfgang F.E. Preiser, ST8:Aug 76:1531:12322
The Color of Structures, ST9:Sept 75:1871:11547
TR:141:396
Design for Differential Movement in Brick Walls, ST11:Nov 75:2385:11739
Dsc: ST9:Sept 76:1957:1366
TR:141:491
Metal Ties and Anchors for Brick Walls, ST4:Apr 76:839:12067
Principles of Composition in Building Art, ST9:Sept 75:1739:11544
TR:141:388
Rationalized Esthetics in Civil Engineering, ST9:Sept 75:1813:11546
TR:141:392
Strength and Related Properties of Brick Masonry, ST1:Jan 75:217:11066
TR:141:176

Grimwood, Charles
Elutriation of Dredge Material in New Orleans Harbor, with Terence J. McGhee, WW76:Aug 76:476

Grinter, Linton E.
Dsc, EI1:Jan 75:76:11036, of "The Making of a "Pro"—A Faculty Viewpoint", EI3:July 74:217:10645

Gromko, Gerald J.
Review of Expansive Soils, GT6:June 74:667:10609
Dsc: Richard H.G. Parry, GT1:Jan 75:78:11037; Lawrence D. Johnson and Donald R. Snethen, GT2:Feb 75:213:11087; Robert Wade Brown, GT3:Mar 75:346:11149; Dinesh Mohan, GT3:Mar 75:347:11149; George F. Sowers, GT4:Apr 75:405:11208; John E. Holland, GT4:Apr 75:406:11208; Varadharaja Dakshanamurthy and Venkataraman Raman, GT6:June 75:588:11339
Clo: GT1:Jan 76:109:11816
TR:141:56

Groper, Meshulam
See Eugenio Pollner, ST1:Jan 75:330:11039

Groscurth, Edward J.
Dsc, CE:Nov 76:30, on Back to the People: Dallas' Blueprint for the 21st Century, CE:July 76:57

Groseclose, William R.
See William P. Simmons, CO3:Sept 76:5277:12421

Gross, Charles P.
Memoir of, TR:141:535

Gross, J. H.
Steels for the Sea, Preprint No.2732, Apr 76, 26pp.

Grosskurth, John F., Jr.
Shear Buckling of Square Perforated Plates, with Richard N. White and Richard H. Gallagher, EM6:Dec 76:1025:12641

Grossman, Donald
Waste Generation Models for Solid Waste Collection, with James F. Hudson and David H. Marks, EE6:Dec 74:1219:11022
Dsc: S. Daniel Ward, EE5:Oct 75:870:11596
Clo: EE2:Apr 76:490:12010
TR:141:193

Grotbeck, Laurence M.
Fish Impingement at Monticello Nuclear Plant, with James L. Bechthold, PO1:July 75:69:11409
TR:141:438

Grubbs, John D.
Dsc, CE:Nov 75:28, on Engineering Education: Can It be More Practical?, CE:July 75:60
Dsc, CE:Nov 75:28, on Reforming Civil Engineering Education, CE:July 75:61

Grubert, John P.
Numerical Computation of Two-Dimensional Flows, WW1:Feb 76:1:11891
Numerical Computation of Well-Mixed Estuarine Flows, HY7:July 76:955:12255

Guarino, Carmen F.
Philadelphia Pilots--Builds Oxygen Activated Sludge, with Michael D. Nelson and Allan B. Edwards, EE4:Aug 74:919:10722
Dsc: Larry D. Bennefield and Clifford W. Randall, EE1:Feb 75:189:11084; George J. Capestany, EE4:Aug 75:678:11467; Anton A. Kalinske, EE4:Aug 75:679:11467
Errata: EE6:Dec 75:1035:11741
TR:141:4
Philadelphia's Water System Automation Plan, with Joseph V. Radziul, Alan Hess, Patrick R. Cairo, Robert E. Day and John J. Smith, Jr., EE5:Oct 76:953:12473

Gudehus, Gerd
On Constitutive Laws for Soils and Rocks, NMG:June 76:III-1305

Guitjens, Johannes C.
Quality of Irrigation Water and Surface Drainage, with W. W. Miller and C. N. Mahannah, IR76:July 76:117

Gularte, Francis B.
See Raymond J. Krizek, Preprint No.2641, Apr 76, 30pp.

Gulbrandsen, Leif F.
See John S. Fisher, OE75:June 75:161

Gunaji, Narendra N.
See Abdul I.Y. Mohammed, HY7:July 75:885:11459

Gundlach, David L.
Unit Hydrograph Parameters Versus Urbanization, TN: IR3:Sept 76:388:12369

Gunnerson, Charles G.
Environmental Design for Istanbul Sewage Disposal, EE1:Feb 74:101:10343
Dsc: Kriton Curi, EE6:Dec 74:1292:10971; John W. Hernandez, EE1:Feb 75:175:11085
Clo: EE5:Oct 75:856:11596
TR:141:49

Gunnerson, Robert A.
Inflatable Dam Regulates River Level, CE:Feb 76:83

Gunnin, Bill L.
See Stephen J. Campbell, ST76:Aug 76:771

Gunwaldson, Ralph W.
Energy Complexes — Conceptual Arrangements, EFEEC:Aug 75:19

Gunzelman, Stephen X.
See Alexis Ostapenko, ST76:Aug 76:549

Gupta, Ajaya K.
See Mahendra P. Singh, ST2:Feb 76:371:11894

Gupta, Davalath S.R.
See John B. Kennedy, ST8:Aug 76:1559:12302

Gupta, J. M.
Optimal Design of Wastewater Collection Systems, with S. K. Agarwal and P. Khanna, EE5:Oct 76:1029:12479

Gupta, Jai P.
Diffusion of Water under Subfreezing Temperature, with Stuart W. Churchill, TN: GT2:Feb 76:185:11885

Gupta, R.
Dsc, SDNPF:Dec 73:III-106, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81

See Shamsher Prakash, NMG:June 76:II-886

Gupta, Radhey K.
See Victor A. Pulmano, TN: EM3:June 76:553:12168

Gupta, Ramesh C.
See Surendra P. Jain, GT9:Sept 74:1031:10823

Gupta, Surendra P.
Solution for Radial-Flow with Nonlinear Adsorption, with Robert A. Greenkorn, EE1:Feb 76:87:11901

Gupta, Vulli L.
Surface Runoff Hydrograph Equation, with Syed Afaq Moin, HY10:Oct 74:1353:10880
Dsc: Subhash C. Mehrotra, HY5:May 75:630: 11270; T. G. Babu Rao, Ganganna Ranganna, Irvathur Vasudeva Nayak, M. Parameswarappa and V. Hiremath, HY10:Oct 75:1361:11600
Clo: HY5:May 76:684:12092
TR:141:140
Time of Concentration of Overland Flow, with Peter J. Sinclair, TN: HY4:Apr 76:547:12018

Guralnick, Sidney A.
See Tung H. Yang, EM2:Apr 76:199:12055

Gurtowski, Thomas M.
See Fred H. Kulhawy, GT9:Sept 76:963:12400

Gustafson, David P.
Dsc, ST10:Oct 76:2093:12441, of "Minimum Cost Selection of One-Way Slab Thickness", ST12:Dec 75:2585:11785

Gutierrez, Leonardo V., Jr.
See Kenneth A. Bartal, HY4:Apr 75:371:11263

Gutkowski, Richard M.
Continuous Plate Analysis by Finite Panel Method, with Chu-Kia Wang, ST3:Mar 76:629:12002

Gutman, Robert
Evaluating the Constructed Environment; A Comparison of Two Biomedical Research Laboratories, with Barbara Westergaard, EFAN: Dec 74:14

Guven, Oktay
See Cesar Farell, EM6:Dec 76:1059:12647

Guy, Harold P.
Urban Sediment Problems: A Statement on Scope, Research, Legislation and Education, HY4:Apr 75: 329:11256
Dsc: Frederick L. Hotes, HY3:Mar 76:427:11950
Clo: HY10:Oct 76:1598:12440
TR:141:296

Guymon, Gary L.
Regional Sediment Yield Analysis of Alaska Streams, HY1:Jan 74:41:10255
Dsc: Stafford C. Happ, HY12:Dec 74:1845:10974
Clo: HY7:July 75:1006:11399
TR:141:29
Soil-Moisture-Temperature for Alaskan Lowland, IR3:Sept 75:187:11562
TR:141:408
Summer Moisture-Temperature for Arctic Tundra, IR4:Dec 76:403:12613
See Guy R. Bafus, WW2:May 76:123:12139

Guzman, Ricardo A.
Design Spectra for Nuclear Power Plants, with Paul C. Jennings, PO2:Nov 76:165:12521

Gwathmey, Cabell
The Constructed Environment with Man as the Measure as Part of the Quality System in Construction, EFAN:Nov 74
Reporter's Summary for Session VI—Summary Session, EFAN:Dec 74:292
See Nathaniel A. Owings, EFAN:Dec 74:5

Gwinn, Wendell R.
Discharge Equations for HS, H, and HL Flumes, with Donald A. Parsons, HY1:Jan 76:73:11874
Dsc: Fred W. Blaisdell, HY11:Nov 76:1704:12508

Ha, Kinh H.
See Paul P. Fazio, ST3:Mar 76:684:11952
See Paul P. Fazio, ST12:Dec 76:2400:12588

Haar, Herbert R., Jr.
The Port of New Orleans in the 18th Century — The Formative Years, Preprint No.2783, Sept 76, 15pp.

Haas, Robert W.
Hydrodynamic Forces on Cables Subject to Frequency Varied Motion, with Richard F. Dominguez, Preprint No.2728, Apr 76, 26pp.

Haas, Wilbur M.
See Bernard D. Alkire, TN: GT8:Aug 76:877:12287

Habib, Philip A.
See Lawrence H. Lehman, TE4:Nov 75:781:11726

Habibian, Mohammad T.
Particles, Polymers, and Performance in Filtration, with Charles R. O'Melia, EE4:Aug 75:567:11512
TR:141:391

Hachum, Ahmed Y.
Water Movement in Soil from Trickle Source, with Jose F. Alfaro and Lyman S. Willardson, IR2:June 76:179:12204

Hadder, A. W.
See Walter M. Grayman, HY5:May 75:567:11327

Hadjian, Asadour H.
Session 6: Soil Structure Interaction — Design and Analysis, STN75:Dec 75:II-191
Dsc, PO2:Nov 73:431:10111, of "Interaction of Soil and Power Plants in Earthquakes", PO2:Oct 72: 273:9242
Dsc, SDNPF:Dec 73:III-47, of "Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities", SDNPF:Dec 73:III-19
Dsc, GT4:Apr 76:380:12013, of "Soil-Structure Interaction Analyses for Seismic Response", GT5: May 75:439:11318
See E. D'Appolonia, SDNPF:Dec 73:III-19

Hagan, Robert M.
See J. Ian Stewart, IR2:June 74:179:10626

Hagedorn, H.
See K. Kovari, NMG:June 76:II-773

Hagerty, D. Joseph
Impact Assessment of Power Plants, with John E. Heer, PO1:Jan 76:81:11823

Haimes, Yacov Y.
Analysis of Multiple Objectives in Water Quality, with Warren A. Hall, HY4:Apr 75:387:11234
Dsc: Kee Kean Chin and Ananthakrishnan Sundar, HY3:Mar 76:426:11950
TR:141:291

Haith, Douglas A.
Land Use and Water Quality in New York Rivers, EE1:Feb 76:1:11902
Dsc: Cheng H. Chiang, EE5:Oct 76:1131:12436; Michael Shapiro and Jochen Kuhner, EE6:Dec 76:1299:12583
Nonpoint Source Pollution from Agricultural Runoff, with John V. Dougherty, EE5:Oct 76:1055:12481
Optimal Control of Nitrogen Losses from Land Disposal Areas, EE6:Dec 73:923:10200
Dsc: Richard I. Dick and John D. Ditmars, EE6: Dec 74:1286:10971
Clo: EE4:Aug 75:663:11467
TR:141:26

Hajdin, Georgije
Diversion Tunnel Capacity Without Backwater in Diverted Flow, with Cedo Maksimovic, WW76:Aug 76:993

Hajj, Hatim M.
Internal Migration Models and Population Forecasts, UP2:Nov 75:201:11680
TR:141:396

Haley, Steven C.
See Kul Bhushan, TN: GT7:July 76:807:12227

Hall, A. Stanley
See Kevin D. Below, ST8:Aug 75:1645:11480

Hall, John
See Emory L. Kemp, EI3:July 75:391:11461

Hall, John R., Jr.
Session 6: Soil Structure Interaction — Finite Element, Lumped Parameter, STN75:Dec 75:II-206
Clo: STN75:Dec 75:II-279
Dsc, with Jean F. Kissenpfennig and Paul C. Rizzo, GT6:June 76:650:12163, of "Soil-Structure Interaction Analyses for Seismic Response", GT5: May 75:439:11318
See Stuart D. Werner, PO1:July 74:127:10636

Hall, W. C.
Dsc, SDNPF:Dec 73:III-103, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81

Hall, Warren A.
See Yacov Y. Haimes, HY4:Apr 75:387:11234
See Jayant Sathaye, IR2:June 76:249:12180
See Jayant Sathaye, IR3:Sept 76:295:12396

Hall, William J.
See William G. Murphy, ST76:Aug 76:997

Hallermeier, Robert J.
Nonlinear Flow of Wave Crests Past a Thin Pile, WW4:Nov 76:365:12551
See William R. James, WW4:Nov 76:379:12552

Hallock, Gene K.
Falsework Eliminated in Bridge Erection, CE:Nov 76:58

Halmos, E. E.
Dsc, DOJ Puzzler, CE:July 76:26

Halperin, David
The Sinking of the Amsterdam Metro, CE:Sept 75:92
TR:141:374

Halpin, Daniel W.
Construction Information Systems in Romania, with Nicolai Tutos, CO2:June 76:335:12176
CONSTRUCTO — An Interactive Gaming Environment, CO1:Mar 76:145:11969

Ham, Robert K.
See Patrick Caffrey, EE1:Feb 75:55:11119

Hamad, Safa N.
See Glen E. Stringham, IR3:Sept 75:209:11569
See J. Clair Batty, IR4:Dec 75:293:11810

Hamada, Sumio
Buckling of Composite Beams in Negative Bending, with Jack Longworth, ST11:Nov 74:2205:10917
Dsc: Hossein Djalaly, ST9:Sept 75:1984:11537; Miklos Ivanyi, ST1:Jan 76:293:11819
TR:141:106
Ultimate Strength of Continuous Composite Beams, with Jack Longworth, ST7:July 76:1463:12267

Hamdan, Abdullatif S.
Screening Model for Conjunctive-Use Water Systems, with Dale D. Meredith, HY10:Oct 75:1343:11611
TR:141:456

Hamel, James V.
Libby Dam Left Abutment Rock Wedge Stability, GT76:Aug 76:361
Mahoning Dam Foundation Reevaluation, with Stuart B. Long and Harry F. Ferguson, GT76:Aug 76:217
Dsc, CO3:Sept 75:679:11533, of "Foundation Considerations for a Nuclear Power Plant", CO1: Mar 75:165:11181
Dsc, GT5:May 76:574:12091, of "Stability of Embankment on Clay", GT9:Sept 75:913:11584

Hammack, Joseph L.
Water Wave Propagation—Linear Versus Nonlinear Theories, with Harvey Segur, OE75:June 75:1247

Hammer, Phillip
Economic and Social Issues of Our Cities, UP1:Aug 76:69:12354

Hammond, David G.
Design of Transit Structures for Urban Areas, with Drupad B. Desai, TE1:Feb 76:1:11918

Hampton, Delon
Unique Team Effort on Washington Subway Project, with David Novick, EI1:Jan 76:129:11872
Dsc: Peter Chiarulli, EI1:Jan 76:136
See Roger A. Butler, GT1:Jan 75:35:11074

Hamrick, John M.
Salinity Intrusion Mechanisms in Estuaries, OE75: June 75:1382

Hamrick, Robert L.
See Sun-Fu Shih, TN: IR1:Mar 76:175:11955

Hancher, Donn E.
Optimizing Capital Investments in Construction, with David K. Gebert, CO4:Dec 76:629:12606

Hancock, Daniel R.
See James E. McCauley, DIEE:Jan 76:673

Hancock, Lawrence F.
See Dan M. Fults, WR1:Apr 76:63:12063

Hand, Irving
Integrated Evaluation Programs, UP1:Aug 76:117: 12334

Handy, Richard L.
Dsc, GT75:June 75:II-143, of "Measurement of In Situ Strength", GT75:June 75:II-57
Dsc, with Glen Ferguson, GT75:June 75:II-168, of "Measurement of In Situ Strength", GT75:June 75: II-57

Haney, Ben J.
Upflow Filter for Potable Water Production, with Stephen E. Steimle, EE4:Aug 75:489:11511
TR:141:383

Hanna, Albert W.G.
Transmission Towers Under Torsional Loads, with Richard G. Redwood, PO1:May 73:105:9701
Dsc: Mahadevan Hariharan and C. P. Vendhan, PO1:July 74:130:10636
Errata: PO2:Nov 73:437:10111
Clo: PO1:Jan 76:145:11818
TR:141:65

Hanna, Thomas H.
Studies on Anchored Flexible Walls in Sand, with Ibrahim I. Kurdi, GT10:Oct 74:1107:10854
Dsc: Reinhard Wolff, GT8:Aug 75:829:11469
Clo: GT1:Jan 76:111:11816
TR:141:141

Hansen, Dee C.
Water Available for Energy—Upper Colorado River Basin, WR2:Nov 76:341:12573

Hansen, Niels-Erik Ottesen
Effect of Wind Stress on Stratified Deep Lake, HY8: Aug 75:1037:11484
Errata: HY7:July 76:1067:12225
TR:141:409

Hansmire, William H.
Dsc, with Edward J. Cording, GT3:Mar 76:259: 11949, of "Subsidence Over Soft Ground Tunnel", GT1:Jan 75:35:11074

Hanson, Robert D.
See Lawrence F. Kahn, ST5:May 76:947:12111
See Addison B. Higginbotham, ST7:July 76:1365: 12245
See Reza Nilforoushan, ST8:Aug 76:1641:12281

Hanuschak, William
Dsc, ST9:Sept 76:1967:12366, of "Yield-Line Design of Slabs", ST1:Jan 76:109:11853

Hanway, John E., Jr.
A Promising New Process for Removing Heavy Metals from Wastewater, with Richard G. Mumford and Dennis G. Barth, CE:Oct 76:78

Happ, Stafford C.
Dsc, HY12:Dec 74:1845:10974, of "Regional Sediment Yield Analysis of Alaska Streams", HY1: Jan 74:41:10255

Harbour, Jerry
Dsc, STN75:Dec 75:II-278, of "New Licensing Philosophy Concerning Soil Structure Interaction", STN75:Dec 75:II-238

Hardcastle, James H.
Water Quality and Aquitard Permeability, with James K. Mitchell, IR2:June 76:205:12203

Harder, James A.
Predicting Estuarine Salinity from River Inflows, Preprint No.2674, Apr 76, 23pp.

Hardesty, Egbert R.
Fifty-Year History of Movable Bridge Construction - Part I, with Henry W. Fischer and Richard W. Christie, CO3:Sept 75:511:11565
Dsc: Peter Kocsis, CO J11023:Sept 76:569:12362; Alfred E. Schmidt and William J. Roa, Jr., CO3:Sept 76:570:12362
TR:141:387
Fifty-Year History of Movable Bridge Construction-Part II, with Henry W. Fischer and Richard W. Christie, CO3:Sept 75:529:11594
Errata: CO1:Mar 76:261:11948
TR:141:442
See Reece H. Wengenroth, CO3:Sept 75:545:11555

Harding, Samuel T.
Dynamic Finite Element Modeling of Near Field from San Fernando 1971 Earthquake, with David Perkins, NMG:June 76:II-955

Hardison, Robert L.
Diary of a Sick Control System, CE:May 75:68
TR:141:211

Hardt, Gunter
Dsc, GT4:Apr 76:376:12013, of "Mica Dam Embankment Stress Analysis", GT3:Mar 75:229: 11162

Hardwick, J. David
Flow-Induced Vibration of Vertical-Lift Gate, HY5: May 74:631:10546
Dsc: Avittathur Achyuthan and Viswanatha Sethuraman, HY4:Apr 75:417:11209
Clo: HY10:Oct 75:1359:11600
TR:141:67

Hargreaves, George H.
Environmental Changes from Surface Water Development, IR76:July 76:298
Dsc, IR4:Dec 76:471:12587, of "Intercontinental Comparison of Evaporation Estimates", IR1:Mar 76:109:11958

Hargrove, James R.
Dsc, CE:June 75:26, on Washington, D.C. Mall Tunnel, CE:Feb 75:64

Hari, V. Mura
Dsc, IR1:Mar 75:69:11150, of "Theory and Practice of Public Participation in Planning", IR1:Mar 74: 75:10391

Hariharan, Mahadevan
Dsc, with C. P. Vendhan, PO1:July 74:130:10636, of "Transmission Towers Under Torsional Loads", PO1:May 73:105:9701

Harlaut, Anders
See Lars-Eric Janson, EE6:Dec 76:1139:12596

Harleman, Donald R.F.
Heat Disposal in Water Environment, HY9:Sept 75: 1117:11585
TR:141:446
See Dominque N. Brocard, HY3:Mar 76:227:11982
See Tavit O. Najarian, Preprint No.2676, Apr 76, 30pp.

Harman, David J.
Analysis of Tall Buildings Using Member Groups, with William H. Walker, ST3:Mar 75:567:11173
TR:141:215

Harr, Milton E.
See William H. Highter, TE3:Aug 75:537:11507
See Jeng Wen Hwang, UP1:Aug 76:157:12345

Harrington, A.
See Michael R. Garrett, WW76:Aug 76:650

Harrington, James E.
A State Government View of Energy Complexes, EFEEC:Aug 75:59

Harrington, Joseph J.
See William C. Pisano, EE1:Feb 75:167:11085
See Jochen Kuhner, UP2:Nov 75:235:11676

Harris, Charles E.
Dsc, EI3:July 76:403:12223, of "When Is A Political Contribution Influence Buying?", EI1:Jan 76:1: 11860

Harris, D. Lee
Dsc, WW4:Nov 75:459:11677, of "Wave Energy Transfer Mechanisms in Wind-Wave Tunnels", WW4:Nov 74:325:10932

Harris, Glenn R.
Estimating Refuse Generation in Office Buildings, with Stuart H. Mann and Craig R. Humphrey, TN: EE5:Oct 76:1111:12442

Harris, Graham P.
Satellite Observations of Water Quality, with Robert P. Bukata and J. Edward Bruton, TE3:Aug 76:537: 12300

Harris, Robert B.
See Richard Louis Wade, CO1:Mar 76:197:11961

Harrison, Carter H., Jr.
Australian Metrication and the Engineer, EI2:Apr 76: 199:12088
Can a Computer Reduce Your Spec Writing Costs?, CE:Apr 76:80
Metrication — An Australian Non-Event, CE:Oct 76:51

Harrison, Howard B.
Interactive Nonlinear Structural Analysis, ST7:July 76:1353:12235

Hart, Gary C.
Earthquake Design of Buildings:Damping, with Ramaswami Vasudevan, ST1:Jan 75:11:11041
Dsc: Tarek S. Aziz, ST11:Nov 75:2444:11675
TR:141:135
Torsional Response of High-Rise Buildings, with Roger M. DiJulio, Jr. and Marshall Lew, ST2:Feb 75:397:11126
TR:141:197

Harten, Ami
See Rong-Tai Ho, OE75:June 75:939

Hartman, R. Michael
Energy Complexes: The Federal Government's Views, EFEEC:Aug 75:334

Hartsock, John A.
Analysis of Sandwich Panels with Formed Faces, with Ken P. Chong, ST4:Apr 76:803:12058

Harvey, Roger C.
Dsc, with Eldon Burley and Arthur W.T. Daniel, GT6:June 76:662:12163, of "Elastoplastic Stress-Strain Theory for Cohesionless Soil", GT10:Oct 75:1037:11670

Hasan, M. Riazul
Dsc, CE:June 75:36, on Corps Guidelines for Dam Safety Inspection Need Revamping, CE:Jan 75:74

Hasegawa, Akio
Buckling Strength of Multiple Stiffened Plates, with Koji Oto and Fumio Nishino, ST76:Aug 76:937

Haseman, William D.
Water Quality Management and Information Systems, with Arthur Z. Lieberman and Andrew B. Whinston, HY3:Mar 75:477:11185
TR:141:270

Haszpra, Otto
Verification of Hydroelastic Similitude Criteria, HY4:Apr 76:469:12048

Hatcher, David S.
See Mohammad Iqbal, ST11:Nov 75:2303:11719

Hatheway, Allen W.
Dsc, P.E.—License for the Subprofessions?, CE:Jan 76:29
Political Involvement of Civil Engineers, EI1:Jan 76:11:11866
A Short-Cut Plan to Enrich ASCE, CE:Nov 75:95
Dsc: John E. McCall, CE:Sept 76:28
See Zen Yang, GT2:Feb 76:123:11893

Hathi, Vidyutkumar V.
See Robert G. Rein, Jr., GT2:Feb 75:115:11134

Hatley, Brennon P.
See John D. Borcherding, CO3:Sept 76:547:12423

Hatt, F.
See Robert J. Melosh, Preprint No.2765, Sept 76, 20pp.

Hauer, Ezra
Location and Capacity of Unsignalized Exits, TE2:May 75:179:11291
TR:141:165

Haug, Edward J., Jr.
See Jasbir S. Arora, ST10:Oct 75:2063:11633

Haussler, Robert W.
Dsc, with Richard F. Pabers, ST12:Dec 76:2375:12588, of "Light-Gage Steel Bolted Connections without Washers", ST7:July 75:1381:11433

Hawkins, Neil M.
1976 Raymond C. Reese Award Presented to Committee on Shear and Diagonal Tension (Joint with ACI), CE:Oct 76:98

Hawkins, Richard H.
Salt Storage and Runoff in Urban Watershed, EE4:Aug 76:737:12292

Hawthorn, Gary
The Current Status of Transportation Control Plans, BP75:Dec 75:557

Hawthorne, Neil S.
See Joe M. Shane, EE2:Apr 75:215:11231

Hayden, J. W.
See James E. Cowley, WW76:Aug 76:1610

Hayes, Richard O.
Impact of Water Resources on Vector-Borne Diseases, WR2:Nov 76:177:12526

Haynes, Harvey H.
Concrete Properties at Ocean Depths, with Roy S. Highberg, Preprint No.2702, Apr 76, 30pp.
Concrete Properties at Ocean Depths, with Roy S. Highberg, WW4:Nov 76:455:12561
See Povindar K. Mehta, ST8:Aug 75:1679:11516

Hays, Clifford O., Jr.
Dsc, ST11:Nov 75:2461:11675, of "Special Problems Related to Linear Equation Solvers", ST4:Apr 75:867:11223

Hazeltine, Craig S.
Motivation of Construction Workers, CO3:Sept 76:497:12376

Head, Christopher R.
Low-Head Air Regulated Siphons, HY3:Mar 75:329:11155
Dsc: Elsayed Alan Ervine and E. M. Elsawy, HY1:Jan 76:102:11817; Richard B. Whittington and Kamil H.M. Ali, HY3:Mar 76:422:11950
Clo: HY10:Oct 76:1597:12440
TR:141:240

Heady, Earl O.
Food and Agricultural Policies, Preprint No.2754, Sept 76, 16pp.

Heald, Henry Townley
Eminent Educators Deceased: Henry Townley Heald, CE:Jan 76:94

Healy, Kent A.
Site Evaluation and Design of Seepage Fields, with Rein Laak, EE5:Oct 74:1133:10882
Dsc: Richard Hult Smith, EE3:June 75:460:11337
Clo: EE5:Oct 75:861:11596
TR:141:168

Hecker, George E.
Dsc, with Peter J. Smith, HY1:Jan 76:108:11817, of "Interaction of Multiple Jets with Ambient Current", HY4:Apr 75:357:11247

Heckeroth, Heinz
Highway User Benefit/Cost Analysis in California, with Charles E. Paulsen, TE4:Nov 76:605:12524

Hedges, Terence S.
See Kamil H.M. Ali, HY12:Dec 75:1543:11744

Heeps, David P.
Independent Comparison of Three Urban Runoff Models, with Russell G. Mein, HY7:July 74:995:10685
Dsc: Jiri Marsalek, T. Milne Dick, Paul E. Wisner and William G. Clarke, HY8:Aug 75:1101:11470
Clo: HY1:Jan 76:93:11817
TR:141:110

Heer, John E.
See D. Joseph Hagerty, PO1:Jan 76:81:11823

Hegab, Hassan I.A.
Dsc, EM6:Dec 76:1097:12584, of "Effective Modulus of Twisted Wire Cables", EM1:Feb 76:171:11944

Heglund, C. Todd
Skyways in Minneapolis/St. Paul: Prototypes for the Nation?, with Richard C. Podolske, BP75:Dec 75:482

Heiberg, Sigurd
Dsc, GT6:June 75:590:11339, of "Numerical Design-Analysis for Piles in Sands", GT6:June 74:613:10617

Heidebrecht, Arthur C.
See Paul C.K. Chan, ST5:May 75:1021:11302

Heightchew, Robert E., Jr.
Countywide Land Use Forecasts, UP2:Nov 75:135:11682
TR:141:451
1976 Edmund Friedman Young Engineer Award for Professional Achievement Presented to Robert E. Heightchew, Jr., Dean M. Golden, and Richard J. Scranton, with Dean M. Golden and Richard J. Scranton, CE:Oct 76:102

Hein, Henry, Jr.
Dsc, CE:Nov 75:24, on Short Span Bridges, CE:July 75:42

Heinemann, Ekkehard
Runner Diameter of Tubular Turbines, with Klaus-Dieter Kraft and Gerhard Rouve, PO1:Jan 76:53:11833

Heinen, Richard
German Design of Floating Concrete Structures, Preprint No.2735, Apr 76, 22pp.

Heins, Conrad P.
Effective Composite Beam Width at Ultimate Load, with Horn Ming Fan, ST11:Nov 76:2163:12538
Field Measurements and Load Spectra of Highway Bridges, ST76:Aug 76:133
Load Factor Design of Continuous-Span Bridges, with Alan D. Kurzweil, ST6:June 76:1213:12219
State-of-the-Art Report on Ultimate Strength of I-Beam Bridge Systems, ST5:May 75:1085:11323
Dsc: J. C. Smith, ST3:Mar 76:682:11952
Clo: ST9:Sept 76:1952:12366
TR:141:298
Ultimate Live Load Distribution Factor for Bridges, with John T.C. Kuo, ST7:July 75:1481:11443
Dsc: Ashok K. Chugh, ST1:Jan 76:307:11819
Clo: ST7:July 76:1511:12226
TR:141:362
See Donald W. Funkhouser, ST7:July 74:1379:10670
See James C. Oleinik, ST10:Oct 75:2161:11634
See Donald W. Vannoy, ST76:Aug 76:720

Heinz, Roney A.
Hydraulic Fill Dams/Earthquake Stability, CE:May 76:55
In Situ Soils Measuring Devices, CE:Oct 75:62
TR:141:403
Keowee-Toxaway Power Project — OUTSTANDING, CE:June 75:46
TR:141:236
New Orleans Grows on Deep Piles, CE:Apr 76:73
Dsc: Joseph C. Brodeur, CE:Sept 76:36
North Sea Oil-Water Mix, CE:Apr 75:70
TR:141:164
Protection of Piles: Steel, Concrete, Wood, CE:Dec 75:59
Dsc: Jack S. Mixer, CE:May 76:32; James E. Colby, CE:May 76:32
TR:141:486
TWA Hangars of Thin Shell Design, CE:Jan 75:55
TR:141:8
See Richard A. Kaden, CE:June 76:41

Heinze, Elizabeth
See David M. Jubenville, ST76:Aug 76:903

Heller, Lyman W.
See Robert G. Easterling, GT10:Oct 76:1126:12439

Heller, Robert A.
Thermal Stress as a Narrow-Band Random Load, EM5:Oct 76:787:12450
See Jann-Nan Yang, Preprint No.2687, Apr 76, 28pp.
See Jann-Nan Yang, EM6:Dec 76:1041:12640

Helmy, Mahmoud A.
Dsc, ST8:Aug 75:1712:11471, of "Torsion-Bending-Shear Interaction for Concrete Beams", ST8:Aug 74:1657:10749

Helweg, Otto J.
Determining Optimal Well Discharge, IR3:Sept 75:201:11566
TR:141:437

Helwig, David R.
Session III — Water Supply and Cooling, EFEEC:Aug 75:412

Hemming, Charles F.
Three Towns: Three Different Solutions to Stormwater Control, CE:Sept 76:65

Henager, Charles H.
Analysis of Reinforced Fibrous Concrete Beams, with Terrence J. Doherty, ST1:Jan 76:177:11847
Dsc: Himat T. Solanki and Jyotish A. Shah, ST9:Sept 76:1966:12366; M. Lakshmipathy, Arumbakkam R. Santhakumar and M. Arockiasamy, ST12:Dec 76:2385:12588

Henderson-Sellers, Brian
Role of Eddy Diffusivity in Thermocline Formation, EE3:June 76:517:12174

Hendricks, David W.
Response of South Platte to Effluent Limitations, with Mark H. Bluestein, EE4:Aug 76:745:12294

Hendricks, T. J.
A Model for Trace Metals from Marine Outfalls, OE75:June 75:1353

Hendron, Alfred J., Jr.
See Bijan Mohraz, CO1:Mar 75:127:11174

Hennigan, Robert D.
Dsc, HY3:Mar 76:451:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445

Herakovich, Carl T.
Elastic-Plastic Torsion of Nonhomogeneous Bars, with Rafik Y. Itani, EM5:Oct 76:757:12446

Herald, William S.
See Beth Irons French, BP75:Dec 75:197

Herman, Robert
Carpools at Large Suburban Technical Center, with Tenny Lam, TE2:May 75:311:11332
TR:141:259

Hernandez, John W.
Recruiting, Scholarship and Work Programs Involving Women and Minority Engineering Students at New Mexico State University, with Roger M. Zimmerman, Preprint No.2796, Sept 76, 10pp.
Dsc, EE1:Feb 75:175:11085, of "Environmental Design for Istanbul Sewage Disposal", EE1:Feb 74:101:10343

Herrmann, Henry
Factoring in Public Participation: Suggestions for Industry, EFEEC:Aug 75:394

Herrmann, Leonard R.
Laplacian-Isoparametric Grid Generation Scheme, EM5:Oct 76:749:12456
See Karl M. Romstad, GT5:May 76:457:12144
See Chih-Kang Shen, GT6:June 76:577:12210

Hershman, Stanley
Presenting Trends in Lake Eutrophication, with Samuel O. Russell, TN: EE6:Dec 76:1281:12638

Herzog, Max A.M.
Dsc, ST8:Aug 75:1723:11471, of "Steel Box-Girder Bridges—Ultimate Strength Considerations", ST12: Dec 74:2433:11014

Hess, Alan
See Carmen F. Guarino, EE5:Oct 76:953:12473

Hess, Frank C., Jr.
Undersea Exploration and Drilling, Preprint No.2743, Sept 76, 9pp.

Hester, F. Eugene
Protection and Enhancement of Fisheries and Wildlife Resources, IR76:July 76:690

Hewitt, Brian E.
Punching Shear Strength of Restrained Slabs, with Barrington deV. Batchelor, ST9:Sept 75:1837:11548
TR:141:399

Hewitt, John P.
See William R. Gee, WW76:Aug 76:492

Hey, Donald L.
Planning for Water Quality: 1776 to 1976, with W. Henry Waggy, Preprint No.2754, Sept 76, 16pp.

Heykoop, Jan
Memoir of, TR:141:542

Hiatt, Wright
Dsc, EE2:Apr 76:495:12010, of "Water Supplies for Low-Income Communities in Developing Countries", EE5:Oct 75:687:11608

Hickman, Robert E.
Industrial, Municipal Wastes Combined, with Charles N. Smith, CE:Dec 76:68

Hicks, R. Gary
See Thomas H. Crawford, BP75:Dec 75:278

Higginbotham, Addison B.
Axial Hysteretic Behavior of Steel Members, with Robert D. Hanson, ST7:July 76:1365:12245

Higgins, George Richardson
Memoir of, TR:141:543

Highberg, Roy S.
See Harvey H. Haynes, Preprint No.2702, Apr 76, 30pp.
See Harvey H. Haynes, WW4:Nov 76:455:12561

Highter, William H.
Cumulative Deflection and Pavement Performance, with Milton E. Harr, TE3:Aug 75:537:11507
TR:141:355

Hill, Donald O.
See Gary C. April, DIEE:Jan 76:833

Hill, Howard T.
See Christopher A. Gardner, PO2:Nov 76:209:12575

Hill, Joseph C.
See Howard H. Chang, HY10:Oct 76:1461:12485

Hill, Norman E.
National Environmental Policies and the Effect on Productivity Through Regulation, PROD:Aug 76: 277

Hill, Robin D.
See George I.N. Rozvany, EM6:Dec 75:755:11797

Himmelblau, David M.
See Khurshed J. Mistry, EE3:June 75:333:11362

Hinkle, R. Dale, Jr.
Impermeable Asphaltic Concrete Pond Liner, CE: Aug 76:56

Hinwood, Jon B.
Classification of Models of Tidal Waters, with Ian G. Wallis, HY10:Oct 75:1315:11643
Dsc: Gerrit Abraham and Max Karelse, HY6:June 76:808:12164
Clo: HY12:Dec 76:1776:12586
TR:141:462
Review of Models of Tidal Waters, with Ian G. Wallis, HY11:Nov 75:1405:11693
Dsc: Gerrit Abraham and Max Karelse, HY6:June 76:808:12164; Michael B. Abbott, HY8: 76: 1145:12280
TR:141:468
See Brian J. Williams, EE1:Feb 76:149:11947

Hipel, Keith W.
See Rammohan K. Ragade, WR2:Nov 76:297:12565

Hiremath, V.
See T. G. Babu Rao, HY10:Oct 75:1361:11600

Hirsch, Carl
The Bicentennial of Structural Engineering, ST76: Aug 76:359

Hirschfeld, Ronald C.
The Role of Geotechnical Engineering in Land Use Planning, EFEEC:Aug 75:65

Hirst, Eric
Automobile Energy Requirements, TE4:Nov 74:815: 10909
Dsc: M. N. Viswanathan, TE3:Aug 75:593:11472
TR:141:79

Ho, Rong-Tai
On Green's Function Techniques for Solutions of Floating Body Problems, with Ami Harten, OE75: June 75:939

Hobbs, E. H.
Using Evapotranspiration Data to Favorably Influence an Irrigated Environment, with K. K. Krogman, IR76:July 76:184

Hochstein, Anatoly B.
Optimum Dredged Depth in Inland Waterway, WW4:Nov 75:331:11698
TR:141:445

Hodge, Raymond J.
The Dallas/Fort Worth Airport Project, EFAN:Dec 74:220
The Dallas/Fort Worth Airport Project, Preprint No.2703, Apr 76, 10pp.

Hoeg, Kaare
Probabilistic Analysis and Design of a Retained Wall, with Ramesh P. Murarka, GT3:Mar 74:349:10436
Dsc: Robert A. D'Andrea, GT1:Jan 75:74:11037
Clo: GT9:Sept 75:979:11534
TR:141:27
See Jean-Herve Prevost, GT3:Mar 75:259:11157
See Jean-Herve Prevost, GT8:Aug 75:717:11488

Hoel, Lester A.
"Para-Transit: Neglected Options for Urban Mobility," by Ronald F. Kirby, et al. (Book Review), CE:July 76:38
See Zdenek P. Bazant, CE:Oct 76:99

Hoffer, Eric
Architects and Nature: On the Primacy of Man, EFAN:Dec 74:8

Hoffman, Edward S.
See William Schmidt, CE:May 75:52

Hoffman, John S.
Facility Location Example of Evaluation Methodology, TE4:Nov 75:817:11727
Dsc: Wayne S. Smith, Alan Sicherman and Ram Kulkarni, TE4:Nov 76:885:12511
TR:141:466

Hoffman, Phillip R.
Optimal Development of Multipurpose Hydro Projects, PO1:July 74:43:10655
Errata: PO1:July 75:139:11400
TR:141:280

Hogan, Michael
See George T. Taoka, ST1:Jan 75:49:11051

Hojo, Koji
See Ryuichi Iida, NMG:June 76:I-232

Holbrook, Robert F.
Stormwater Studies and Alternatives in Atlanta, with Armando I. Perez, Billy G. Turner and Herbert I. Miller, EE6:Dec 76:1263:12614

Holeman, Theopolis
Dsc, with Jack V. Matson, EE5:Oct 75:874:11596, of "Clean Air Equals Dirty Water", EE1:Feb 75:87:11125

Holland, John E.
Dsc, GT4:Apr 75:406:11208, of "Review of Expansive Soils", GT6:June 74:667:10609

Holland, John L.
Can We Engineer Vocational Assessment and Counseling for Everyone?, CE:May 76:92

Holley, Edward R.
Stratified Flow in Great Salt Lake Culvert, with Kidd M. Waddell, HY7:July 76:969:12250
Dsc, PO1:July 74:133:10636, of "The Dissipation of Excess Heat from Water Systems", PO1:May 73:089:9702
See Ahmed M. Ger, HY6:June 76:731:12172

Holley, M. J.
Dsc, SDNPF:Dec 73:III-104, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81
See John D. Stevenson, SDNPF:Dec 73:III-81

Hollick, Malcolm
Boundary Shear Stress Measurement by Preston Tube, TN: HY7:July 76:1053:12228

Hollings, P. J.
See Edward L. Wilson, ST1:Jan 76:298:11819

Hollingsworth, William F.
Fifty-Year Development: Construction of Steel Arch Bridges, CO1:Mar 75:85:11187
TR:141:202

Hollis, Charles W.
Legislative Impacts on Dredging — General Regulatory Functions, DIEE:Jan 76:1

Hollman, Kenneth W.
See Wayne E. Boyet, WW76:Aug 76:127

Holmes, Alfred P., Jr.
See David H. Webb, DIEE:Jan 76:83

Holtz, Robert D.
Civil Engineers and Unions in Sweden, CE:Nov 75:53
TR:141:440
Dsc, EI2:Apr 75:299:11206, of "The Making of a "Pro"—A Faculty Viewpoint", EI3:July 74:217:10645
Dsc, GT12:Dec 76:1284:12585, of "Anisotropy in Heavily Overconsolidated Kaolin", GT12:Dec 75:1277:11808
See K. Rainer Massarsch, GT75:June 75:II-260

Holze, Gordon H.
Free Vibration Analysis Using Substructuring, with Arthur P. Boresi, ST12:Dec 75:2627:11788
Dsc: Wlodzimierz Gawronski, ST11:Nov 76:2247:12510
TR:141:506

Hom-ma, Masashi
Dsc, HY7:July 75:1026:11399, of "Free Surface Slopes at Controls in Channel Flow", HY8:Aug 74:1107:10753

Honda, Kenneth K.
Measurements and Evaluation of Building Response to Ground Motion at Various Stages of Construction, ST76:Aug 76:403

Honts, Robert G.
San Antonio Ranch Case Study— National Environmental Policy Act, UP2:Nov 75:127:11683
TR:141:478

Hoose, Seena N.
See T. Leslie Youd, GT5:May 76:425:12143

Hopkins, Thomas C.
See C. Thomas Gorman, GT75:June 75:II-139

Hore, Frank R.
An Overview of Environmental Effects of Agricultural Drainage in Canada, with Robert S. Broughton, IR76:July 76:138
See E. F. Bolton, IR76:July 76:221

Horii, Robert C.
See Donald C. Tillman, EE1:Feb 75:87:11125

Horikawa, Kiyoshi
Coastal Engineering—State-of-the-Art Summary, OE75:June 75:217

Hornberger, George M.
Atmospheric Reaeration in a River Using Productivity Analysis, with Mahlon G. Kelly, EE5:Oct 75:729:11644
Dsc: Doyle W. Stevens, David J. Shultz and Ronald E. Rathbun, EE4:Aug 76:869:12277
TR:141:460

Horner, Frank
Hi-Rise in Wood, Preprint No.2798, Sept 76, 8pp.

Horstkotte, Gerry A.
See Denny S. Parker, EE6:Dec 75:985:11789

Horvat, Endre
See Alphonsus I. M. Claessen, GT8:Aug 74:925:10764

Hossain, Iman
Coefficients to Analyze Rectangular Slab Bridges, ST1:Jan 75:151:11048
Dsc: Anthony R. Cusens, ST11:Nov 75:2449:11675
Clo: ST5:May 76:1162:12093
TR:141:151

Hotes, Frederick L.
Dsc, HY10:Oct 75:1365:11600, of "Subsurface Environment—Private Property or Public Domain?", HY11:Nov 74:1699:10958
Dsc, HY3:Mar 76:427:11950, of "Urban Sediment Problems: A Statement on Scope, Research, Legislation and Education", HY4:Apr 75:329:11256

Hou, Ho-Shong
Influence of Equivalent Sand Roughness on the Dispersion Coefficient in Laboratory and Natural Streams, with Bent A. Christensen, WW76:Aug 76: 1179

Houck, Ralph E.
See James P. Jones, WW76:Aug 76:249

Houlsby, Adam C.
Dsc, GT4:Apr 75:403:11208, of "Planning and Performing Compaction Grouting", GT6:June 74: 653:10606

Hovland, H. John
Dsc, GT7:July 76:820:12224, of "End Effects on Stability of Cohesive Slopes", GT11:Nov 75:1105: 11705

Howard, Charles D.D.
Theory of Storage and Treatment-Plant Overflows, EE4:Aug 76:709:12310
Dsc, HY3:Mar 76:445:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75: 847:11445
See A. G. Spafford, HY9:Sept 75:1282:11535
See Paul E. Flatt, IR76:July 76:435

Howard, Robert H.
See R. Richard Avent, ST4:Apr 76:821:12061

Howell, John A.
See Bernard Atkinson, EE4:Aug 75:585:11505

Howells, David A.
Dsc, GT3:Mar 76:265:11949, of "Liquefaction and Cyclic Mobility of Saturated Sands", GT6:June 75: 551:11388

Howells, David H.
Water Quality Dimensions of Water Resources Planning, HY2:Feb 75:277:11146
TR:141:238
See Ants Uiga, CE:Mar 76:60

Howland, W. E.
More on "The Existential Pleasures of Engineering," by Samuel C. Florman (Book Review), CE:Sept 76: 38

Howland, Warren E.
Dsc, CE:May 75:20, on Interstate Highway System, CE:Mar 75:51

Hroncich, Mark J.
See Richard T. Richards, HY2:Feb 76:139:11900

Hsiu, Frank J.
Soil Pressure and Overturning Analyses of Structures Under Three Directional Seismic Loads by Using SRSS Combination, STN75:Dec 75:II-331

Hsiung, Kou-ying
Determining Specific Deposit by Backwash Technique, EE2:Apr 74:353:10449
Dsc: Kenneth J. Ives, EE6:Dec 74:1297:10971; N. Sriramulu, S. V. Ranade and Malay Chaudhuri, EE2:Apr 75:271:11205
Clo: EE5:Oct 75:858:11596
TR:141:70

Hsu, Jende
Demand Model for Bus Network Design, with Vasant H. Surti, TE3:Aug 76:451:12309

Hsu, Thomas T.C.
Design of Reinforced Concrete Spandrel Beams, with Kenneth T. Burton, ST1:Jan 74:209:10277
Dsc: Unnikrishna S. Pillai, ST5:May 75:1151: 11271
Clo: ST12:Dec 75:2675:11746
TR:141:13

Hu, Min-Hsiung
See Ralph Ta-Shun Cheng, HY1:Jan 75:155:11076

Huang, Chin-Pao
Dsc, EE1:Feb 76:223:11876, of "Use of Crushed Limestone to Neutralize Acid Wastes", EE1:Feb 75:139:11131

Huang, Norden E.
See Jerry L. Machemehl, OE75:June 75:142

Huang, Rodney J.
See Fujiya Komamura, GT7:July 74:807:10675

Huang, Wen
See Hung Tao Shen, HY1:Jan 76:106:11817
See Hung Tao Shen, NMG:June 76:II-1054

Huang, Wen H.
Determination of Length and Direction of Ocean Outfall Diffuser at Wantagh Sewage Treatment Plant, Nassau County, New York, OE75:June 75: 1294

Huang, Yang H.
FE Analyses of Rafts on Viscoelastic Foundations, NMG:June 76:I-463
Stability of Slopes by Logarithmic-Spiral Method, with Craig M. Avery, GT1:Jan 76:41:11838

Huck, Peter M.
Water Quality Models Using the Box-Jenkins Method, with Grahame J. Farquhar, EE3:June 74: 733:10629
Dsc: Yoram J. Litwin and Erhard F. Joeres, EE3: June 75:449:11337
Clo: EE6:Dec 75:1032:11741
TR:141:111

Hudson, Donald E.
See Bruce A. Bolt, GT11:Nov 75:1095:11697

Hudson, James F.
See Louis A. Fuertes, UP2:Nov 74:155:10913
See Donald Grossman, EE6:Dec 74:1219:11022
See Frank T. Rabe, UP2:Nov 75:217:11728

Hudspeth, Robert T.
Dsc, with Min-Chu Chen, WW3:Aug 76:353:12284, of "Effect of Structures on Irregular Waves Compared to Regular Waves", WW3:Aug 75:231: 11494

Huggett, Jack W.E.
See Angus J. McKenzie, TE4:Nov 74:855:10920

Hughes, Roger L.
Dsc, HY9:Sept 75:1287:11535, of "Similitude in Free-Surface Vortex Formations", HY11:Nov 74: 1565:10941
Dsc, HY9:Sept 75:1291:11535, of "Vortex Suppression in Stilling Pond Overflow", HY11:Nov 74:1685:10969

Hull, Cecil H.J.
Implementation of Interstate Water Quality Plan, HY3:Mar 75:495:11177
TR:141:262

Hull, Wesley V.
Control Densification by Analytic Photogrammetry, SU1:Oct 75:11:11624
TR:141:142
See John D. Bossler, SU1:Oct 75:115:11657

Humenick, Michael J.
See David Malish, EE4:Aug 76:872:12277

Humenik, Frank J.
"Manual of Engineering Practice on Sanitary Landfill," by the ASCE Solid Waste Management Committee of the Environmental Engineering Division (Book Review), CE:Aug 76:34

Hummel, Paul L.
See Raymond J. Krizek, Preprint No.2641, Apr 76, 30pp.

Humpherys, Allan S.
Automated Valves for Surface Irrigation Pipelines, with Robert L. Stacey, IR2:June 75:95:11380
Errata: IR2:June 76:268:12165
TR:141:393

Humphrey, Craig R.
See Glenn R. Harris, TN: EE5:Oct 76:1111:12442

Humphries, Wilfred K.
See Y. Cho, Preprint No.2752, Sept 76, 28pp.

Hunder, Marcus Benjamin
Memoir of, TR:141:544

Hung, Che S.
Stochastic Models of Sediment Motion on Flat Bed, with Hsieh W. Shen, HY12:Dec 76:1745:12639

Hunt, Bruce W.
Radial Dispersion in Ground-Water Flow, EM6:Dec 74:1117:10998
Dsc: Lynn W. Gelhar, John L. Wilson and Michael A. Collins, EM5:Oct 75:718:11598
Clo: EM2:Apr 76:367:12012
TR:141:156
Thermal Calculations for Bridge Design, with Nigel Cooke, ST9:Sept 75:1763:11545
Dsc: M. J.N. Priestley and S. Thurston, ST6:June 76:1277:12166; George H. Alliy, ST7:July 76:1515:12226
TR:141:390

Hunt, Doug
See Jerome R. Butler, Jr., CE:Sept 75:104

Hunt, Glenn Curtis, Sr.
Memoir of, TR:141:545

Hunt, Hal W.
Dsc, CE:Sept 76:33, on Stress Ribbon Bridge in Freiburg, Germany, CE:May 76:75

Hunt, James L.
Turbidity-Suspended Solids in Channel Construction, with John J. Mank, Preprint No.2794, Sept 76, 15pp.

Hunt, John T.
See Robert R. Smith, Preprint No.2711, Apr 76, 16pp.

Hunt, Julian C.R.
Dsc, ST11:Nov 75:2446:11675, of "Dynamic Tornadic Wind Loads on Tall Buildings", ST1:Jan 75:169:11045

Hunt, Michael O.
Structural Characteristics of Weathered Plywood, with DeForest A. Matteson, Jr., ST4:Apr 76:759:12050

Hunt, P. G.
See J. M. Brannon, DIEE:Jan 76:455

Hunt, Richard T.
See Fred C. McCormick, EM4:Aug 75:417:11520

Hunt, Robert G.
A Potential Irrigation-Conservation Program for 300,000 Acres in Northern Maine, Preprint No.2762, Sept 76, 23pp.

Hunt, Steven D.
See Kenneth F. Reinschmidt, EI2:Apr 75:117:11248

Hunter, William G.
See Paul M. Berthouex, EE1:Feb 75:127:11132

Hurlbert, Don D.
Horizontal Control in Kansas City by State Plane Coordinates, with J. Douglas McDonald, SU1:Dec 76:9:12598

Hurst, C. K.
Dsc, In Appreciation, CE:June 76:34

Hussain, Altaf
Engineering Services for Construction, CO3:Sept 74:273:10787
Dsc: S. M. Saleem Moini, CO2:June 75:437:11336; Mohammad Mushtaq, CO2:June 75:438:11336; Roland S. Jary, CO2:June 75:440:11336
Clo: CO4:Dec 75:937:11740
TR:141:36
Excelling as a Construction Contractor, CO4:Dec 74:621:11029
Dsc: S. M. Saleem Moini, CO3:Sept 75:676:11533
Clo: CO1:Mar 76:257:11948
TR:141:129
Masjid (Mosque) Designing, UP1:Aug 76:177:12349
Masjid (Mosque) Planning, UP1:Aug 76:171:12348
Dsc, CO2:June 74:192:10563, of "Basic Construction Principles in Higher Latitudes", CO1:Mar 74:33:10399

Hussain, M. Iqbal
Trapezoidally Corrugated Plates in Shear, with Charles Libove, ST5:May 76:1109:12159

Hutchinson, Ronald L.
See Richard G. Ahlvin, TE3:Aug 74:625:10727
See Yu Tang Chou, TE2:May 75:247:11307

Huyakorn, Pongsarl
Investigation of Two-Regime Well Flow, with Colin R. Dudgeon, HY9:Sept 76:1149:12383

Hwang, Chih-Tsung
Dsc, with David W. Murray, GT12:Dec 75:1301:11743, of "Heat Transfer in Soil-Water-Ice Systems", GT2:Feb 75:97:11123

Hwang, H. M.
See Masanobu Shinozuka, Preprint No.2650, Apr 76, 30pp.

Hwang, Jeng Wen
Modeling of Health Care Delivery, with Milton E. Harr, UP1:Aug 76:157:12345

Hwang, Richard N.
See H. Bolton Seed, GT5:May 75:439:11318
See John Lysmer, STN75:Dec 75:II-125

Hyden, John W.
Simulation of Water Quality Management Policies, with James A. Chisman and Hugh H. Macaulay, EE4:Aug 75:623:11524
TR:141:403

Idriss, Izzat M.
Progress Report of ASCE Ad Hoc Committee on Soil Structure Interaction, STN75:Dec 75:II-236
Seismic SSI of Nuclear Power Plant Structures, with Khosrow Sadigh, GT7:July 76:663:12246
Dsc, SDNPF:Dec 73:III-53, of "Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities", SDNPF:Dec 73:III-19
See E. D'Appolonia, SDNPF:Dec 73:III-19
See H. Bolton Seed, GT7:July 75:651:11449
See Kenneth L. Lee, GT8:Aug 75:801:11527
See Kenneth L. Lee, GT9:Sept 75:871:11542
See H. Bolton Seed, GT9:Sept 75:889:11541

Iffland, Jerome S.B.
Folded-Plate Structures, Preprint No.2807, Sept 76, 66pp.
High Rise Building Column Design, Preprint No.2740, Sept 76, 28pp.

Igwe, Okay Cyril
Irrigation Return Flow Water Quality Analysis, with T. L. Coulthard, IR76:July 76:519

Ihsanullah, Khaled O.
See Anthony R. Cusens, ST5:May 76:1170:12093

Iida, Ryuichi
Study of Deformation Characteristics and Analyses of Jointed Rock Masses, with Koji Hojo and Kozo Saito, NMG:June 76:I-232

Ikeda, Syunsuke
See Hideo Kikkawa, HY9:Sept 76:1327:12416

Illston, John M.
See Leslie J. Parrott, EM1:Feb 75:13:11118

Ilo, ChiEmeka G.
Resistance to Flows in Alluvial Channels, HY6:June 75:665:11352
Dsc: Thomas E. Cheyer, HY1:Jan 76:118:11817; Fuat Senturk, HY3:Mar 76:436:11950; Gerrit J. Klaasen and Adry Prins, HY4:Apr 76:535:12014; D. M. Kondap, HY6:June 76:789:12164; H. D. Sharma and Dharam V. Varshney, HY6:June 76:790:12164
TR:141:336

Imberger, Jorg
See Rufus B. Darden, HY9:Sept 75:1211:11583

Inderbitzen, Anton L.
Marine Soil Mechanics and Foundations II, State-of-the-Art Summary, OE75:June 75:486

Indlekofer, Horst
Discharge over Polygonal Weirs, with Gerhard Rouve, HY3:Mar 75:385:11178
Errata: HY1:Jan 76:105:11817
TR:141:265

Ingersoll, Alfred C.
Professional Development—An Educator's Viewpoint, EI4:Oct 75:471:11660
TR:141:469
The Professional Engineer Half a Century Hence, CE:Mar 75:74
TR:141:115

Ingham, Alan T.
Dsc, EE5:Oct 76:1128:12436, of "Unsaturated Flow During Soil Treatment of Septic Tank Effluent", EE6:Dec 75:967:11783

Ingraham, Diane V.
See E. Eric Adams, OE75:June 75:41

Inoue, Yoriteru
See Sadataka Shiba, EE5:Oct 75:741:11609

Ippen, Arthur T.
See Chiang C. Mei, WW3:Aug 74:217:10754

Iqbal, Mohammad
Post-Crushing Behavior of Unbound Concrete Beams, with David S. Hatcher, ST11:Nov 75:2303:11719
Dsc: Javed Yunas Uppal, ST9:Sept 76:1956:12366
TR:141:475
Dsc, EI4:Oct 76:482:12437, of "Inequities in Minority Engineer Education", EI4:Oct 75:499:11666

Irish, James L.
Dsc, HY12:Dec 75:1545:11744, of "Rainfall Temporal Patterns for Design Floods", HY1:Jan 75:81:11057

Irobe, Makoto
See Tomoyuki Akagi, NMG:June 76:II-639

Irvine, H. Max
Analytical Solutions for Pretensioned Cable Nets, EM1:Feb 76:43:11908
Lateral Stability of Cable Truss, with Paul C. Jennings, EM4:Aug 75:403:11519
TR:141:342
Post-Elastic Response of Suspended Cables, EM6:Dec 75:725:11760
TR:141:466
Statics and Dynamics of Cable Trusses, EM4:Aug 75:429:11506
Dsc: Hugo Mollmann, EM3:June 76:587:12162
Clo: EM6:Dec 76:1094:12584
TR:141:319
Statics of Suspended Cables, EM3:June 75:187:11351
Errata: EM3:June 76:579:12162
TR:141:228
Dsc, ST6:June 76:1286:12166, of "Natural Vibrations of Suspension Cables", ST11:Nov 75:2277:11712

Irwin, Andrew W.
Dsc, ST1:Jan 75:357:11039, of "Three-Dimensional Analysis of Shear Wall Buildings to Lateral Load", ST5:May 74:1019:10537

Irwin, George R.
See Richard Roberts, ST2:Feb 76:337:11913
See Ali Abtahi, ST11:Nov 76:2103:12516

Irwin, H. P.A.H.
See K. R. Cooper, ST76:Aug 76:286

Irwin, Ross W.
Effect of Drainage on the Subsidence of Organic Soil, IR76:July 76:211

Isaacson, Michael de St. Q.
Transverse Forces on Vertical Cylinders in Waves, with David J. Maull, WW1:Feb 76:49:11934
Dsc: Subrata K. Chakrabarti, WW4:Nov 76:491:12512; Turgut Sarpkaya, WW4:Nov 76:493:12512

Isaak, Elmer B.
Toward A More United ASCE, EI1:Jan 76:7:11859

Isaksen, Robert A.
Nighttime Visibility Through Retro-Reflective Materials, BP75:Dec 75:426

Isenberg, Jeremy
Interaction of Soil and Power Plants in Earthquakes, with Samy A. Adham, PO2:Oct 72:273:9242
Dsc: Chang Chen, Garry J. Patterson and Don K. Croneberger, PO2:Nov 73:429:10111; Asadour H. Hadjian, PO2:Nov 73:431:10111; Nien-Chien Tsai, PO2:Nov 73:434:10111; Stuart D. Werner and John R. Hall, Jr., PO1:July 74:127:10636
Clo: PO1:July 75:129:11400
TR:141:34
Dsc, EM4:Aug 75:497:11468, of "Dual Failure Criterion for Plain Concrete", EM6:Dec 74:1167:10996
See Ivan Nelson, NMG:June 76:I-41

Ishibashi, Isao
Soil Liquefaction by Torsional Simple Shear Device, with Mehmet A. Sherif, GT8:Aug 74:871:10752
Dsc: Richard S. Ladd and Marshall L. Silver, GT8:Aug 75:827:11469
Clo: GT1:Jan 76:110:11816
TR:141:104
See Mehmet A. Sherif, GT11:Nov 76:1171:12572

Ishizaki, Hatsuo
Loadings and Codes for Typhoon Resistant Design, ST10:Oct 76:2073:12496

Islam, Shafiqul
Tests on Slab-Column Connections with Shear and Unbalanced Flexure, with Robert Park, ST3:Mar 76:549:11972
See Robert Park, ST9:Sept 76:1879:12419

Ismael, Nabil F.
See Jean M.E. Audibert, NMG:June 76:I-567

Itani, Rafik Y.
See Carl T. Herakovich, EM5:Oct 76:757:12446

Ito, Yoshinori
See Tomoyuki Akagi, NMG:June 76:II-639

Ivanyi, Miklos
Dsc, ST1:Jan 76:293:11819, of "Buckling of Composite Beams in Negative Bending", ST11:Nov 74:2205:10917
Dsc, ST6:June 76:1260:12166, of "Load Tests of Building Structures", ST5:May 75:1111:11322

Iverson, W. P.
See E. Escalante, Preprint No.2733, Apr 76, 22pp.

Ives, Kenneth J.
Dsc, EE6:Dec 74:1297:10971, of "Determining Specific Deposit by Backwash Technique", EE2:Apr 74:353:10449

Iyengar, B. S.R.
Dsc, HY7:July 75:1028:11399, of "Free Surface Slopes at Controls in Channel Flow", HY8:Aug 74:1107:10753

Izumi, Hiromitsu
Finite Element Analysis of Stresses and Movements in Excavations, with Katsumi Kamemura and Seiichi Sato, NMG:June 76:II-701

Jackson, Lowell B.
See John P. Klus, EI3:July 75:419:11428

Jackson, Thomas J.
Hydrology of Porous Pavement Parking Lots, with Robert M. Ragan, HY12:Dec 74:1739:11010
Dsc: Himat T. Solanki and Joseph A. Valenti, HY8:Aug 75:1113:11470; James R. Carr, HY8:Aug 75:1114:11470; Rajathurai Ganeswaran and Ananthakrishnan Sundar, HY11:Nov 75:1453:11672
Clo: HY6:June 76:782:12164
TR:141:171
See Robert M. Ragan, HY12:Dec 75:1469:11790

Jacob, C. M.
See Sita Ram Singh, EM5:Oct 76:807:12463

Jacobs, Arthur W.
See Ward R. Malisch, SU1:Oct 75:129:11656

Jacoby, Samuel L.S.
See Claude R. Gagnon, TE3:Aug 75:553:11515

Jagannathan, Dharapuram S.
Nonlinear Analysis of Reticulated Space Trusses, with Howard I. Epstein and Paul P. Christiano, ST12:Dec 75:2641:11799
Dsc: Kuang-Han Chu, ST7:July 76:1530:12226; Narayanan Subramanian, ST10:Oct 76:2095:12441
TR:141:512

Jain, Akalank K.
Accurate Explicit Equation for Friction Factor, TN: HY5:May 76:674:12129
Dsc, with Kittur G. RangaRaju, HY11:Nov 75:1451:11672, of "Similitude in Free-Surface Vortex Formations", HY11:Nov 74:1565:10941
See Prabhata K. Swamee, HY5:May 76:657:12146

Jain, Bhagwat P.
Dsc, ST10:Oct 76:2102:12441, of "Analysis of Cable-Stiffened Space Structures", ST3:Mar 76:501:11998

Jain, Om P.
See Prem S. Nigam, PO1:Jan 76:35:11830
See Prem S. Nigam, PO1:Jan 76:95:11845

Jain, Satish C.
Yield Criterion for Reinforced Concrete Slabs, with John B. Kennedy, ST3:Mar 74:631:10409
Dsc: M. W. Braestrup, ST1:Jan 75:353:11039
Clo: ST7:July 75:1614:11401
TR:141:41

Jain, Subhash C.
Longitudinal Dispersion Coefficients for Streams, EE2:Apr 76:465:12037
Turbulent Jets with Reversible Buoyancy, with Jose M. Pena, HY9:Sept 75:1221:11586
Dsc: Subhash C. Mehrotra, HY4:Apr 76:545:12014; John D. Ditmars and David M. Shahrabani, HY10:Oct 76:1605:12440
TR:141:449
Dsc, HY9:Sept 75:1290:11535, of "Flow and Bed Topography in Channel Bends", HY11:Nov 74:1631:10963
Dsc, HY11:Nov 76:1701:12508, of "Numerical Errors in Water Profile Computation", HY11:Nov 75:1389:11694
See Jean-Claude Tatinclaux, PO1:July 75:43:11415
See Yasuo Onishi, HY7:July 76:899:12248

Jain, Surendra P.
In-situ Shear Test for Rock Fills, with Ramesh C. Gupta, GT9:Sept 74:1031:10823
Dsc: Gopal Ranjan and Shamsher Prakash, GT9:Sept 75:983:11534
Clo: GT5:May 76:565:12091
TR:141:127

Jalal, Kazi F.
See Stephen V. Allison, IR1:Mar 74:69:10394

James, L. Douglas
Economics and Water Resources Planning in America: 1776-1976, with Jerry R. Rogers, Preprint No.2754, Sept 76, 30pp.
See Alan M. Lumb, HY10:Oct 76:1515:12499
See Jerry A. McCrory, WR2:Nov 76:193:12522
See Thomas N. Yancey, Jr., WR2:Nov 76:265:12564

James, Robert W.
Text of Comments Regarding California's Legal Experience in the Liability of Public Interests, EFRLD:Sept 75:115

James, Wesley P.
See David J. Barr, TE2:May 75:279:11300

James, William R.
Nearshore Wave Direction Gage, with Robert J. Hallermeier, WW4:Nov 76:379:12552

Jamison, Warren
Analysis of an Irrigation Return Flow Issue, with John E. Knoll and Thomas J. Crooks, IR76:July 76:532

Janbu, Nilmar
Dsc, GT75:June 75:II-150, of "Measurement of In Situ Strength", GT75:June 75:II-57
Dsc, GT75:June 75:II-253, of "In Situ Measurement of Initial Stress and Deformation Characteristics", GT75:June 75:II-181
Dsc, GT75:June 75:II-349, of "In Situ Measurement of Volume Change Characteristics", GT75:June 75:II-279
See Mete Oner, NMG:June 76:II-1025

Janes, Henry W.
Massive Compaction of Granular Soil — How We Stand, with Robert D. Anderson, Preprint No.2777, Sept 76, 28pp.

Jankov, Ziva D.
See Ajoy Banerjee, ST10:Oct 75:2133:11637

Janney, Jack R.
We Created the Problem; Only We Can Solve It!, EI3:July 75:429:11436
TR:141:442

Janson, Lars-Eric
Equalization of Flow Variations in Combined Sewers, with Stein Bendixen and Anders Harlaut, EE6:Dec 76:1139:12596

Jarvis, John J.
Multiple Criteria Theory and Airport Site Evaluation, with V. Ed Unger, Charles C. Schimpeler and Joseph C. Corradino, UP1:Aug 76:187:12353

Jary, Roland S.
Dsc, CO2:June 75:440:11336, of "Engineering Services for Construction", CO3:Sept 74:273:10787

Jategaonkar, Ravindra P.
See John Marshall, ST7:July 75:1393:11424

Jayachandran, P.
Simulation of N-Degree Stochastic Wind Force Vector for the Three-Dimensional Dynamic Analysis of Tall Buildings, with William E. Saul, ST76:Aug 76:269
See William E. Saul, ST5:May 76:1059:12112

Jayaraman, V. V.
See B. S. Pani, HY7:July 75:1016:11399

Jellinek, H. H.G.
See Guenther E. Frankenstein, WW76:Aug 76:1487

Jen, Yuan
Cooled Seawater Discharge in Harbor Environment, with Richard B. Dornhelm, OE75:June 75:1362

Jenkins, Frank A.
The Nuclear Energy Center Impact on Land Use, EFEEC:Aug 75:73

Jennings, Paul C.
See H. Max Irvine, EM4:Aug 75:403:11519
See Ricardo A. Guzman, PO2:Nov 76:165:12521

Jennings, W. R.
Dsc, Proposal for the Retired, CE:Dec 76:27

Jens, Stifel W.
Dsc, HY6:June 76:793:12164, of "ASCE Urban Water Resources Research Program". HY7:July 75:847:11445

Jensen, Eugene T.
Problems in Integrating Water Programs, HY3:Mar 75:467:11202
TR:141:286

Jensen, Loren D.
Impact of Energy Complexes on Freshwater Environments, EFEEC:Aug 75:235

Jeppson, Roland W.
Pressure Reducing Valves in Pipe Network Analysis, with Allen L. Davis, HY7:July 76:987:12252
See Gary Z. Watters, HY7:July 76:831:12236

Jethwani, Mohan
See Martin Lang, CE:Jan 76:54

Jewell, William J.
See Richard P. Michael, EE4:Aug 75:643:11532

Jezequel, Jean-Francois
See Francois Baguelin, GT75:June 75:II-231
See Francois Baguelin, GT75:June 75:II-231

Jhaveri, Dilip P.
See Joseph P. Nicoletti, ST76:Aug 76:796

Jilani, A. K.M.
See A. L. Swami, HY1:Jan 74:235:10251

Jimenez, Rafael
Interface Shear Transfer and Dowel Action in Cracked Reinforced Concrete Subject to Cyclic Shear, with Philip Perdikaris, Peter Gergely and Richard N. White, ST76:Aug 76:457

Jobling, Graham A.
Physical Model Study of Border-Strip Irrigation, with A. Keith Turner, IR4:Dec 73:493:10195
Dsc: Pratap Singh and Hernanda S. Chaudan, IR4:Dec 74:513:10975
Clo: IR3:Sept 75:225:11536
TR:141:57

Jobson, Harvey E.
The Dissipation of Excess Heat from Water Systems, PO1:May 73:089:9702
Dsc: Edward R. Holley, PO1:July 74:133:10636
Clo: PO1:July 75:133:11400
TR:141:92
Use of Depth Profiles for Flow-Model Calibration, with Thomas N. Keefer, WW76:Aug 76:641
See Baum K. Lee, HY7:July 74:849:10657

Joeres, Erhard F.
See Yoram J. Litwin, EE3:June 75:449:11337
See Martin H. David, EE2:Apr 76:433:12045

Johannesson, Palmi
See Per Moller Bruun, WW2:May 76:141:12136

Johanson, Edward E.
Silt Curtains for Dredging Turbidity Control, DIEE:Jan 76:990

John, Peter H.
Float Calibration in Intergrated-Float Techniques, with F. Allan Johnson and Peter Sutcliffe, HY8:Aug 76:1071:12308

Johns, David J.
See S. Gopalacharyulu, EM5:Oct 73:943:10085
See Prabhu S. Kundurpi, EM5:Oct 75:517:11612

Johns, Kenneth C.
See Mohammed Z. Khan, ST10:Oct 75:2079:11619

Johnson, Beverly M.
Highway Fill — A Broad-Crested Weir, CE:Oct 76:60

Johnson, Edmund G.
New Foundations in an Old Neighborhood, CE:Nov 76:50

Johnson, Edward A.
Porous Friction Course Solves Airport Hydroplaning Problem, with Thomas D. White, CE:Apr 76:90

Johnson, F. Allan
See Peter H. John, HY8:Aug 76:1071:12308

Johnson, Fred W.
See Sie Ling Chiang, WR2:Nov 76:227:12553

Johnson, George
Lumped Parameter Circular Plate Stability Analysis, with Walter Pilkey, TN: ST5:May 76:1135:12128

Johnson, Gerald W.
Arctic Refraction Study, SU1:Dec 76:1:12602

Johnson, Gordon R.
Short Duration Analytic Earthquake, with Howard I. Epstein, ST5:May 76:993:12109
Stiffness Coefficients for Embedded Footings, with Paul P. Christiano and Howard I. Epstein, GT8:Aug 75:789:11522
TR:141:410
Dsc, with Howard I. Epstein, EM4:Aug 76:746:12278, of "Dynamic Stiffness of Circular Foundations", EM6:Dec 75:771:11800

Johnson, Harry W.
Three Dimensional Seismic Analysis for a Floating Nuclear Plant Using Finite Element Procedures, with Ashok K. Vaish and Frank L. Porter, Preprint No.2700, Apr 76, 23pp.

Johnson, Joe W.
Characteristics and Behavior of Pacific Coast Tidal Inlets, WW3:Aug 73:325:9927
Dsc: Richard Silvester, WW3:Aug 74:251:10699; Per Moller Bruun and Franciscus Gerritsen, WW4:Nov 74:389:10903; Ashish J. Mehta, WW4:Nov 74:397:10903; Morrough P. O'Brien, WW4:Nov 74:398:10903; Jade Dattatri and Irvathur Vasudeva Nayak, WW4:Nov 74:399:10903
Clo: WW3:Aug 75:295:11473
TR:141:20

Johnson, Lawrence D.
Dsc, with Donald R. Snethen, GT2:Feb 75:213:11087, of "Review of Expansive Soils", GT6:June 74:667:10609

Johnson, Leland R.
Origins of Federal Waterways Engineering, WW76:Aug 76:1130

Johnson, Nolan L., Jr.
Economics of Permanent Flood-Plain Evacuation, IR3:Sept 76:273:12378

Johnson, Norman J.
Success Model for Minority Engineering Programs, with E. Louis Overstreet, EI1:Jan 75:67:11084
TR:141:157

Johnson, R. P.
Dsc, ST5:May 75:1156:11271, of "Composite Steel-Concrete Construction", ST5:May 74:1085:10561

Johnson, Robert L.
See Paul H. King, EE4:Aug 75:479:11531

Johnson, Ronald E.
See John C. Ludwick, WW4:Nov 75:357:11703

Johnson, W. H.
Conowingo-Peach Bottom Energy Complex; Financial, Legal and Public Relations Aspects, EFEEC:Aug 75:292

Johnson, Wendell E.
Dsc, EI2:Apr 75:252:11268, of "Effectiveness of Present Operating Procedures and of the PAC Structure", EI2:Apr 75:247:11268

Johnston, Bruce G.
Design Applications: The SSRC Guide, Third Edition, Preprint No.2802, Sept 76, 33pp.

Johnston, Colin D.
Ferrocement—Behavior in Tension and Compression, with Samir G. Mattar, ST5:May 76:875:12104
Ferrocement—Material Behavior in Flexure, with Dallas N. Mowat, ST10:Oct 74:2053:10878
Dsc: Krishnaiyengar Rajagopalan, ST8:Aug 75:1721:11471; G. V. Surya Kumar, ST10:Oct 75:2182:11601
Clo: ST5:May 76:1149:12093
TR:141:101
Fifty-Year Developments in High Strength Concrete, CO4:Dec 75:801:11757
Errata: CO4:Dec 76:691:12582
TR:141:455

Johnston, David W.
Prestressed Box Beams under Combined Loading, with Paul Zia, ST7:July 75:1313:11421
Dsc: Anh-Tuan Le, ST5:May 76:1165:12093
Clo: ST12:Dec 76:2373:12588
TR:141:330

Johnston, Monroe M.
Dsc, CE:Mar 75:24, on Corps Guidelines for Dam Safety Inspection Need Revamping, CE:Jan 75:74

Johnston, Robert
See Peter Richerson, HY2:Feb 75:259:11136

Johnston, Robert C.
Optimizing Selection of Marine Retaining Walls, with Max Bernheimer and Dominic A. Zarrella, GT12:Dec 76:1209:12624
Optimizing the Selection of Marine Retaining Walls, with Max Bernheimer and Dominic A. Zarrella, Preprint No.2710, Apr 76, 28pp.

Jolly, J. Peter
Simulation Accuracies of Gradually Varied Flow, with Vujica Yevjevich, HY7:July 74:1011:10677
Dsc: Ben Chie Yen and Ahmet Suha Sevuk, HY6:June 75:786:11340; Charles Samuel Martin and David C. Wiggert, HY7:July 75:1021:11399; Alexander Anderson, HY7:July 75:1024:11399
TR:141:107

Jones, D. Earl, Jr.
Dsc, HY7:July 76:1065:12225, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445
See Thomas N. Yancey, Jr., CE:Sept 76:94
See Jerry A. McCrory, WR2:Nov 76:193:12522
See Thomas N. Yancey, Jr., WR2:Nov 76:265:12564

Jones, James P.
Marseilles Lock Rehabilitation: Illinois Waterway, with Ralph E. Houck, WW76:Aug 76:249

Jones, Norman B.
Dsc, CO2:June 75:449:11336, of "Repair of Earthquake Damaged Underground Reservoir", CO3:Sept 74:449:10825

Jones, Richard A.
See Roberta H. Ewald, EI2:Apr 75:175:11228

Jones, Robert L.
Environmental Impact Reports: Problems and Opportunities, CE:May 75:71
Dsc: Amos Roos, CE:Aug 75:34; Richard L. Anglin, Jr., CE:Sept 75:26; Jan A. Kem, CE:Oct 75:38
TR:141:216

Jones, Russel C.
Kickbacks Versus Professional Ethics, EI3:July 75:357:11420
TR:141:385
Russel C. Jones Takes Office in Philadelphia, CE:Oct 76:93

Jonsson, Ivar G.
Dsc, WW1:Feb 76:108:11882, of "Friction Factor under Oscillatory Waves", WW2:May 75:135:11292
See Ove Skovgaard, WW1:Feb 75:15:11100

Jordaan, Ian J.
Collapse of Curved Reinforced Concrete Beams, with Magdi M. A. Khalifa and Arthur E. McMullen, ST11:Nov 74:2255:10951
Dsc: Himat T. Solanki, ST7:July 75:1623:11401
Clo: ST5:May 76:1151:12093
TR:141:114
See Allen L. Mee, ST2:Feb 75:377:11121

Jordaan, Jan Malan, Jr.
Artificial Island Engineering, OE75:June 75:777

Jordan, Mark H.
Education for the Professional Construction Manager, with Robert I. Carr, CO3:Sept 76:511:12392
Methodology of Construction Industry Profiling: A Case History, EI1:Jan 76:67:11864
Dsc, CO3:Sept 75:670:11533, of "Predesign Cost-Estimation Function for Buildings", CO4:Dec 74:589:10992

Jordan, Thomas A.
See Mriganka M. Ghosh, EE1:Feb 75:71:11120

Joshi, Arun D.
See Prakash Desayi, ST9:Sept 76:1903:12420

Joshi, Ramesh C.
New and Conventional Engineering Uses of Fly Ash, with Donald M. Duncan and Howard M. McMaster, TE4:Nov 75:791:11730
Errata: TE4:Nov 76:887:12511
TR:141:481

Jubenville, David M.
Software: Internal Maintenance Documentation, with Elizabeth Heinze and Robert L. Schiffman, ST76: Aug 76:903
See Robert L. Schiffman, NMG:June 76:II-1228

Judge, J. A.
Regulation/Strangulation — Contractor's Viewpoint, PROD:Aug 76:239

Judson, Arnold S.
New Productivity Improvement Strategies for the Engineering/Construction Industry, PROD:Aug 76: 49

Jullien, J. F.
Applications of Photoelasticity to Structural Analysis, with R. Duhau and J. C. Cubaud, EM5:Oct 76:867: 12486

Kabaila, Algis P.
See Sid French, ST9:Sept 75:1801:11553

Kachadoorian, Reuben
See Leonard LeSchack, CE:Apr 75:57

Kaden, Richard A.
Today's Northwest Passage, with Roney A. Heinz, CE:June 76:41

Kaeser, Thomas P.
Maintenance of Delivery Services for Chicago's State Street Transit Mall, BP75:Dec 75:528

Kahan, Sam
Apparel-Goods Movement Process, with Carl M. Berkowitz and Walter H. Kraft, TE3:Aug 76:507: 12298

Kahn, Lawrence F.
Inelastic Cycles of Axially Loaded Steel Members, with Robert D. Hanson, ST5:May 76:947:12111

Kald, Lembit
See Robert D. Stoll, Preprint No.2752, Sept 76, 26pp.

Kaldjian, Movses J.
Inelastic Cyclic Response of Split K-Braced Frames, Preprint No.2788, Sept 76, 15pp.

Kalinske, Anton A.
Dsc, EE4:Aug 75:679:11467, of "Philadelphia Pilots--Builds Oxygen Activated Sludge", EE4:Aug 74:919: 10722

Kallaby, Joseph
Seismic Analysis of Offshore Structures in the Inelastic Range, Preprint No.2722, Apr 76, 30pp.

Kalyanaraman, V.
Unstiffened Compression Elements, with Teoman B. Pekoz and George Winter, Preprint No.2807, Sept 76, 38pp.

Kameda, Hiroyuki
Evolutionary Spectra of Seismogram by Multifilter, EM6:Dec 75:787:11805
TR:141:486
Reliability Theory of Deteriorating Structures, with Takeshi Koike, ST1:Jan 75:295:11079
TR:141:188

Kamemura, Katsumi
See Hiromitsu Izumi, NMG:June 76:II-701

Kameswara Rao, C. V.S.
See Ramnath N. Swamy, EM2:Apr 75:156:11207

Kameswara Rao, N. S.V.
See S. P. Dasgupta, NMG:June 76:II-1038

Kaminetzky, Dov
Structural Failures and How to Prevent Them, CE: Aug 76:60

Kamiya, Norio
Axisymmetrical Deformation of Bimodulus Orthotropic Circular Cylindrical Shell, EM1:Feb 76:89:11916

Kamlet, Kenneth S.
Impact of Public Law 92-532 on Dredging and Disposal, DIEE:Jan 76:49

Kamphuis, J. William
Friction Factor under Oscillatory Waves, WW2:May 75:135:11292
Dsc: William D. Grant, WW4:Nov 75:466:11677; Ivar G. Jonsson, WW1:Feb 76:108:11882
Clo: WW3:Aug 76:349:12284
TR:141:326
Placing Artificial Beach Nourishment, with S. G. Bridgeman, OE75:June 75:197

Kanafani, Adib
Strategies for Alleviating Impact of Aircraft Noise, with Abdullah Mogharabi, TE4:Nov 75:657:11715
TR:141:411

Kanchi, Madhu B.
See Prem S. Nigam, PO1:Jan 76:95:11845

Kanchi, Mahesh B.
See Prem S. Nigam, PO1:Jan 76:35:11830

Kane, Ronald S.
Hydraulic Performance of Tilting-Disk Check Valves, with Soung M. Cho, HY1:Jan 76:57:11873
Errata: HY11:Nov 76:1703:12508

Kao, Chiao F.
See Yeun C. Wu, EE5:Oct 76:969:12468

Kao, David T.Y.
Spatially Varied Flow in Channel Transitions, with S. Dean Perry, WW76:Aug 76:1551

Kao, Timothy W.
Selective Withdrawal Criteria of Stratified Fluids, HY6:June 76:717:12188

Kaplan, Kenneth
See Bernard L. Gabrielsen, Preprint No.2771, Sept 76, 26pp.

Kapoor, Mahesh P.
See Amitabha Ghosal, CO4:Dec 74:631:11034

Kapur, Kanwar K.
New Licensing Philosophy Concerning Soil Structure Interaction, STN75:Dec 75:II-238
Dsc: Donald Walters, STN75:Dec 75:II-273; Alan M. Ebner, STN75:Dec 75:II-274; Jerry Harbour, STN75:Dec 75:II-278; Julio E. Valera, STN75: Dec 75:II-278; William A. Brandes, STN75:Dec 75:II-281
Clo: STN75:Dec 75:II-281
See Nathan M. Newmark, PO2:Nov 73:287:10142

Kar, Anil K.
Seismic Supports for Electrical Cable Systems," with Sitansu S. Sinha, PO1:July 75:95:11464
Errata: PO2:Nov 76:232:12509
TR:141:528

Karadi, Gabor M.
See Raymond J. Krizek, EE2:Apr 76:389:12040

Karelse, Max
See Gerrit Abraham, HY6:June 76:808:12164
See Gerrit Abraham, HY6:June 76:808:12164

Karki, Karam S.
Supercritical Flow Over Sills, HY10:Oct 76:1449:12480

Karlsson, Inge
See Lennart Elfren, ST8:Aug 74:1657:10749

Karlsson, Thorbjorn
Ocean Wave Refraction Near Reykjavik, Iceland, with J. Eliasson, OE75:June 75:1232

Karren, Kenneth W.
Strain Hardening and Aging in Cold-Formed Steel, with Mahendrasinhji M. Gohil, ST1:Jan 75:187:11067
TR:141:178

Kasemset, Chesada
Inelastic Stability of Beams under Biaxial Bending, with Fumio Nishino and Seng-Lip Lee, EM5:Oct 74:965:10881
Dsc: Sundaramoorthy Rajasekaran, EM5:Oct 75:717:11598
TR:141:130

Kashef, Abdel-Aziz I.
Control of Salt-Water Intrusion by Recharge Wells, IR4:Dec 76:445:12617

Kashmier, Jim
Illinois: First Steps in Bikeway Development, BP75:Dec 75:75

Kasper, Rolf G.
Sytems Approach to the Mechanics of Array Cables, OE75:June 75:610

Katner, Harold
Bikes and Malls, BP75:Dec 75:4

Katona, Michael G.
See Theodore A. Shugar, EM3:June 75:223:11367

Kauffman, Kenneth O.
See Gilbert G. Stamm, EFEEC:Aug 75:147

Kaufman, Robert I.
Effect of Top Stratum Permeability on Design of Seepage Control Measures, GT75:June 75:II-39
Dsc, GT75:June 75:II-39, of "Field Measurement of Permeability in Soil and Rock", GT75:June 75:II-3

Kausel, Eduardo
Dynamic Analysis of Footings on Layered Media, with Jose M. Roesset and Gunter Waas, EM5:Oct 75:679:11652
TR:141:437
Dynamic Stiffness of Circular Foundations, with Jose M. Roesset, EM6:Dec 75:771:11800
Dsc: Gordon R. Johnson and Howard I. Epstein, EM4:Aug 76:746:12278
TR:141:479
Nonlinear Behavior in Soil-Structure Interaction, with Jose M. Roesset and John T. Christian, GT11:Nov 76:1159:12579
Session 6: Soil Structure Interaction — Nonlinear Effects, STN75:Dec 75:II-223
Dsc, with Victor Chang-Liang, EM6:Dec 75:909:11742, of "Earthquake Finite Element Analysis of Structure-Foundation Systems", EM6:Dec 74:1101:10990
See G. W. Blaney, NMG:June 76:II-1001

Kavanagh, Thomas C.
A Crtical Review of ASCE's Planning and Policy Process, EI4:Oct 74:343:10890
Errata: EI4:Oct 75:523:11597
TR:141:61
Some Esthetic Considerations in Steel Design, ST11:Nov 75:2257:11718
Dsc: Anton Tedesko, ST11:Nov 76:2238:12510
TR:141:473

Kawamoto, T.
Stress and Stability Analyses of Underground Openings Taking Post-Failure Behavior of Rock into Consideration, with T. Saito, NMG:June 76:II-791

Kay, J. Neil
Interlock Tension in Steel Sheet Piling, ST10:Oct 75:2093:11638
TR:141:453

Kay, James Neil
Safety Factor Evaluation for Single Piles in Sand, GT10:Oct 76:1093:12494
Sheet Pile Interlock Tension-Probabilistic Design, GT5:May 76:411:12122
See John F. Abel, NMG:June 76:II-873

Kazmann, Raphael G.
Management of Waste Fluids in Salaquifers, with Oscar K. Kimbler and Walter R. Whitehead, IR4:Dec 74:413:10991
Dsc: Robert L. McFall, IR4:Dec 75:317:11745
TR:141:273
Dsc, EI2:Apr 75:302:11206, of "Statement of Affirmative Action Principles", EI3:July 74:183:10688

Keefer, Thomas N.
Multiple Linearization Flow Routing Model, with Raul S. McQuivey, HY7:July 74:1031:10668
Dsc: Tae Hoon Yoon, HY8:Aug 75:1099:11470
Clo: HY2:Feb 76:225:11879
TR:141:99
Two Dam Break Routing Models, with Raul S. McQuivey, WW76:Aug 76:201
Dsc, with James O. Sherman and Raul S. McQuivey, HY4:Apr 76:538:12014, of "Nonlinear Channel Routing by Computer", HY6:June 75:651:11353
See Raul S. McQuivey, EE4:Aug 74:997:10708
See Harvey E. Jobson, WW76:Aug 76:641
See Raul S. McQuivey, HY10:Oct 76:1409:12478
See Raul S. McQuivey, HY10:Oct 76:1425:12490

Keever, R. E.
See John D. Stevenson, SDNPF:Dec 73:III-81

Keith, E. J.
Dsc, SDNPF:Dec 73:III-104, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81
See John D. Stevenson, SDNPF:Dec 73:III-81

Keller, Jack
See J. Clair Batty, IR4:Dec 75:293:11810

Keller, Robert J.
Developing Region in Self-Aerated Flows, with K. K. Lai and Ian R. Wood, HY4:Apr 74:553:10501
Dsc: Krishnamurthy Gopalakrishnan, HY11:Nov 74:1729:10898; Eric J. Lesleighter, HY2:Feb 75:319:11088; Kamil H.M. Ali, HY9:Sept 75:1278:11535
Clo: HY4:Apr 76:529:12014
TR:141:63
Prediction of Flow Development on Spillways, with Ashok K. Rastogi, HY9:Sept 75:1171:11581
Dsc: Kamil H.M. Ali, HY9:Sept 76:1401:12364
TR:141:439

Kellerhals, Rolf
Classification and Analysis of River Processes, with Michael Church and Dale I. Bray, HY7:July 76:813:12232
Dsc, with Michael Church, HY1:Jan 76:115:11817, of "Nonequilibriun River Form", HY5:May 75:557:11334

Kellogg, Joseph C.
See Donald C. Taylor, EI3:July 76:369:12271

Kelly, Mahlon G.
See George M. Hornberger, EE5:Oct 75:729:11644

Kelly, Thomas A.
One Owners Dam Safety Program and Its Application Under Government Regulations, EFRLD:Sept 75:105

Kelly, William E.
Ground-Water Pollution Near a Landfill, EE6:Dec 76:1189:12609
Modeling the Chipuxet Ground Water Aquifer, NMG:June 76:II-1188

Kem, Jan A.
Dsc, CE:Oct 75:38, on Environmental Impact Reports: Problems and Opportunities, CE:May 75: 71

Kemp, Emory L.
Case Study of Burr Truss Covered Bridge, with John Hall, EI3:July 75:391:11461
TR:141:461
Civil Engineering: Education and Practice, EI1:Jan 76:17:11868

Kempner, Leon, Jr.
See Frederick B. Dewey, ST11:Nov 75:2439:11675

Kennedy, John B.
Bending of Skew Orthotropic Plate Structures, with Davalath S.R. Gupta, ST8:Aug 76:1559:12302
See Satish C. Jain, ST3:Mar 74:631:10409
See Samir A. Zaghloul, EM3:June 75:169:11345

Kennedy, John F.
River-Ice Problems: A State-of-the-Art Survey and Assessment of Research Needs, with George D. Ashton, HY1:Jan 74:1:10281
Dsc: Charles R. Neill, HY3:Mar 75:546:11148
Clo: HY10:Oct 75:1359:11600
TR:141:32
See Poothrikka P. Paily, HY4:Apr 74:531:10479
See Daniel T.L. Chan, HY6:June 75:733:11383
See Daniel T.-L. Chan, HY8:Aug 75:1105:11470
See Poothrikka P. Paily, HY12:Dec 75:1548:11744
See Daniel T.-L. Chan, HY5:May 76:615:12141
See Yasuo Onishi, HY7:July 76:899:12248
See Mehmet S. Uzuner, HY9:Sept 76:1365:12412

Kenney, T. Cameron
Dsc, GT3:Mar 76:268:11949, of "Failures in Limestones in Humid Subtropics", GT8:Aug 75: 771:11521

Kerfoot, Robert P.
See John A. Richards, ST1:Jan 75:131:11056

Kern, David W.
See Kenneth L. Dickson, HY7:July 75:965:11463

Kerr, William C.
Parametric Instabilities of Cable Hanging from Ship, OE75:June 75:569

Kesler, Clyde E.
Control of Expansive Concretes During Construction, CO1:Mar 76:41:11968
Reinforced Concrete Materials — A Remarkable Heritage, Preprint No.2755, Sept 76, 21pp.

Ketchum, Milo S.
See Ahmed Shaaban, ST11:Nov 76:2151:12543

Kettle, Kenath A.
Project Delivery Systems for Construction Projects, CO4:Dec 76:575:12594

Keulegan, Garbis H.
See Larry L. Daggett, HY11:Nov 74:1565:10941

Keuning, Date H.
Application of Finite Element Method to Open Channel Flow, HY4:Apr 76:459:12053

Key, Samuel W.
See Steven E. Benzley, EM3:June 76:447:12217

Keyes, Conrad G., Jr.
Augmentation of 1968-1972 Winter Storms in New Mexico, HY12:Dec 76:1725:12616

Khachaturian, Narbey
See Lawrence A. Twisdale, ST5:May 75:1005:11297

Khalid, Rashid A.
See Robert P. Gambrell, DIEE:Jan 76:418

Khalifa, Magdi M. A.
See Ian J. Jordaan, ST11:Nov 74:2255:10951

Khalil, Mohamed Bakr
River Regime with Special Reference to River Nile, HY1:Jan 75:135:11072
Dsc: Mohammed K. Alam, HY1:Jan 76:97:11817; Shrikrishna V. Chitale, HY1:Jan 76:98:11817
TR:141:206

Khan, Fazlur
Fazlur Khan: A Look to the Sky, CE:July 76:69

Khan, Fazlur R.
New Concepts-Byproducts of Computer Technology, ST4:Apr 75:627:11243
TR:141:256
See George T. Taoka, ST1:Jan 75:49:11051

Khan, Mohammed Z.
Buckling of Web Plates under Combined Loadings, with Kenneth C. Johns, ST10:Oct 75:2079:11619
TR:141:433

Khanna, P.
See Pramod K. Swamee, EE1:Feb 74:93:10375
See J. M. Gupta, EE5:Oct 76:1029:12479

Khanna, Sudarshan K.
See Madan G. Arora, NMG:June 76:I-511

Khorram, Siamak
Effects of Temperature and Kelthane on Grass Shrimp, with Allen W. Knight, EE5:Oct 76:1043: 12475

Khosla, Vijay K.
Stress-Strain Behavior of Sand, with Tien H. Wu, GT4:Apr 76:303:12079

Khuayjarernpanishk, Thanasarn
See Warren L. Schroeder, Preprint No.2731, Apr 76, 28pp.

Kidder, Alice E.
Public Response to Carpooling Programs, with Bruce Morgan and Arthur Saltzman, TE3:Aug 76:571: 12340

Kiely, John Roche
1976 Can-Am Civil Engineering Amity Award Presented to John Roche Kiely, CE:Oct 76:104

Kieslich, J. M.
Channel Entrance Response to Jetty Construction, with Curtis Mason, OE75:June 75:689

Kikkawa, Hideo
Flow and Bed Topography in Curved Open Channels, with Syunsuke Ikeda and Akira Kitagawa, HY9:Sept 76:1327:12416

Kilkenny, W. M.
See Surendra K. Saxena, OE75:June 75:450

Killoy, David H.
See Miau-Chang Wang, Preprint No.2664, Apr 76, 19pp.

Kim, Byung R.
Influence of Activated Sludge CRT on Adsorption, with Vernon L. Snoeyink and F. Michael Saunders, EE1:Feb 76:55:11937

Kim, C. H.
The Influence of Water Depth on Ship Motion in Oblique Waves, OE75:June 75:653

Kim, Jai B.
Full-Scale Lateral Load Tests of Pile Groups, with Robert J. Brungraber, GT1:Jan 76:87:11849
Dsc: Sol M. Gleser, GT12:Dec 76:1288:12585; Hudson Matlock and Stephen H.C. Foo, GT12: Dec 76:1291:12585

Kim, Kenneth B.
See William R. Gee, WW76:Aug 76:492

Kimbler, Oscar K.
See Raphael G. Kazmann, IR4:Dec 74:413:10991

Kimura, Tsutomu
See Hakuju Yamaguchi, NMG:June 76:I-183

King, Danny L.
See Glenn L. Beichley, HY7:July 75:829:11462

King, Darrell L.
Wastewater Recycling: Coupling Aquatic and Land Irrigation Systems, with Thomas G. Bahr, IR76:July 76:128

King, John C.
Dsc, Canons of Ethics—Recommendations, CE:Sept 76:34

King, John P.
Impact of the Public on Proposed Offshore Oil Terminal and Refinery, EFEEC:Aug 75:276

King, Paul H.
High-Rate Water Treatment: The State-of-the-Art, with Robert L. Johnson, Clifford W. Randall and Glenn W. Rehberger, EE4:Aug 75:479:11531
TR:141:383
See Clifford W. Randall, EE5:Oct 75:795:11646
See Zdenek P. Bazant, CE:Oct 76:99

King, W. James
The Aerospace Industry and the Civil Engineer, with Donald McDonald, Preprint No.2808, Sept 76, 20pp.

Kirk, D. Wayne
Concrete L-Beams Subject to Combined Torsional Loads, with David G. McIntosh, ST1:Jan 75:269: 11064
Dsc: Himat T. Solanki, ST11:Nov 75:2455:11675
TR:141:170

Kirkby, R. W.
See John L. Meek, NMG:June 76:II-901

Kirkhope, James
Out-of-Plane Vibration of Thick Circular Ring, EM2: Apr 76:239:12022

Kirkland, William G.
Bill Kirkland—A Construction Industry "Mr. Standards", CE:Nov 76:84

Kirkley, Owen M.
Earthquake Response of Offshore Structures, with Joseph P. Murtha, OE75:June 75:865

Kirkness, Robert W.
See Peter S. Chisholm, IR76:July 76:193

Kirpich, Phillip Z.
Leadership Constraint in Project Preparation, EI4: Oct 76:417:12503
Dsc, IR4:Dec 74:515:10975, of "Irrigation Development in Bangladesh", IR1:Mar 74:69:10394

Kirsch, Uri
Multilevel Approach to Optimum Structural Design, ST4:Apr 75:955:11259
TR:141:264

Kiser, James P.
1976 Daniel W. Mead Prize for Students Presented to James P. Kiser, CE:Oct 76:105

Kissenpfennig, Jean F.
See John R. Hall, Jr., GT6:June 76:650:12163

Kitagawa, Akira
See Hideo Kikkawa, HY9:Sept 76:1327:12416

Kitipornchai, Sritawat
Buckling of Inelastic I-Beams under Moment Gradient, with Nicholas S. Trahair, ST5:May 75: 991:11295
Dsc: Sriramulu Vinnakota, ST4:Apr 76:862:12015
Clo: ST11:Nov 76:2234:12510
TR:141:277
Elastic Behavior of Tapered Monosymmetric I-Beams, with Nicholas S. Trahair, ST8:Aug 75:1661: 11479
TR:141:373
Inelastic Buckling of Simply Supported Steel I-Beams, with Nicholas S. Trahair, ST7:July 75:1333: 11419
Dsc: Sriramulu Vinnakota, ST6:June 76:1263: 12166; David Allen, ST6:June 76:1265:12166
TR:141:329

Kittredge, David
Dsc, CE:Jan 76:28, on What's New in Water Treatment?, CE:Sept 75:69

Kivett, Hanan A.
Air Passenger Handling Facilities: Future Planning-Design Impacts, TE3:Aug 76:461:12289

Kiwak, M.
See D. Wozniak, EE3:June 76:567:12197

Klaasen, Gerrit J.
Dsc, with Adry Prins, HY4:Apr 76:535:12014, of "Resistance to Flows in Alluvial Channels", HY6: June 75:665:11352

Klaiber, F. Wayne
See Wallace W. Sanders, Jr., ST7:July 76:1383:12247
See Hotten A. Elleby, ST12:Dec 76:2285:12625

Klee, Albert J.
Models for Evaluation of Hazardous Wastes, EE1: Feb 76:111:11940
Errata: EE6:Dec 76:1303:12583

Kleiman, Pablo
Hydraulic Transport of Copper Tailings, TN: HY10: Oct 76:1589:12444

Kleine-Kracht, Joseph A.
Dsc, CE:Sept 76:30, on Energy Conservation in Existing Buildings, CE:Sept 75:79

Kleinfeld, Ira H.
Manpower Use in High-Rise Residential Construction, CO2:June 76:379:12178

Kline, Donald E.
See Paul R. Blankenhorn, TE1:Feb 75:65:11102

Klingsch, Wolfram
Dsc, ST6:June 76:1268:12166, of "Effects of Elevated Temperature on Structural Members", ST7:July 75:1531:11440

Klink, William D.
Propensity of Statewide Multimodel Transportation, with Jason C. Yu, TE4:Nov 75:639:11710
TR:141:404

Klippstein, Karl H.
See Charles G. Schilling, ST1:Jan 75:31:11049

Klotz, Louis H.
Computer Modeling and Testing of Timber Trusses for Design Instruction, Preprint No.2737, Sept 76, 30pp.

Klump, Edwin H.
Past and Future of Construction Equipment — Part II, CO4:Dec 75:689:11777
TR:141:522

Klus, John P.
Enlightened Employers' Continuing Education Policies, with Lowell B. Jackson and C. Allen Wortley, EI3:July 75:419:11428
TR:141:424

Knapp, Robert R.
Coring the Deep Oceans for Science, with Valdemar F. Larson, OE75:June 75:784

Knell, Raymond E.
Dsc, CE:Apr 75:20, on Improving Your Writing, CE: Jan 75:60

Knight, Allen W.
See Siamak Khorram, EE5:Oct 76:1043:12475

Knoll, John E.
See Warren Jamison, IR76:July 76:532

Ko, Hon-Yim
Nonlinear Characterization and Analysis of Sand, with Raymond M. Masson, NMG:June 76:I-294
See Richard Henry Atkinson, NMG:June 76:I-367
See Stein Sture, NMG:June 76:I-580

Ko, Stephen C.
Nuclear Power Plant Cooling System Selection, PO1: July 75:55:11405
TR:141:335

Kobayashi, Shoichi
See Yoshiji Niwa, NMG:June 76:I-120

Koch, Carl Mark
Flow Regulation Effects on Stream Flow Prediction, WW76:Aug 76:627

Koch, F.
See Peter R.B. Ward, EE3:June 75:455:11337

Kocsis, Peter
The Equivalent Length of a Pile or Caisson in Soil, CE:Dec 76:63
Dsc, CO J11023:Sept 76:569:12362, of "Fifty-Year History of Movable Bridge Construction - Part I", CO3:Sept 75:511:11565

Koehn, Edward
See Vasily Kouskoulas, CO4:Dec 74:589:10992

Koehn, Enno
Social and Environmental Costs in Construction, CO4:Dec 76:593:12599

Koelzer, Victor A.
New Growth Centers—A Role for the Bureau of Reclamation, WR2:Nov 76:311:12576

Koenig, A.
Management Model for Wastewater Disposal on Land, with Daniel P. Loucks, IR76:July 76:321

Koepp, Glenn R.
1976 Daniel W. Mead Prize for Associate Members Presented to Glenn R. Koepp, CE:Oct 76:104

Koerner, Robert M.
Acoustic Emission Behavior of Granular Soils, with Arthur E. Lord, Jr., W. Martin McCabe and John W. Curran, GT7:July 76:761:12239
Settlement of Building on Pile Foundation in Sand, with Antal Partos, GT3:Mar 74:265:10405
Dsc: Robert P. Vallee, GT10:Oct 74:1169:10838; William D. Kovacs and Gerald A. Leonards, GT2:Feb 75:209:11087
Clo: GT8:Aug 75:825:11469
TR:141:11

Kohn, Melvin J.
Dsc, CE Compliments, CE:Oct 76:22

Kohnke, Peter C.
Dsc, TE4:Nov 75:836:11673, of "Pipeline Stress Analysis", TE1:Feb 75:163:11122

Koike, Takeshi
See Hiroyuki Kameda, ST1:Jan 75:295:11079

Kolar, Vaclav
Dsc, HY7:July 75:1018:11399, of "Estimation of Washload Produced on Certain Small Watersheds", HY7:July 74:835:10638

Koloseus, Herman J.
Dsc, HY7:July 75:1029:11399, of "Circular Jumps", HY8:Aug 74:1133:10758

Koluvek, Paul
See Luther B. Grass, IR4:Dec 74:477:10997

Komamura, Fujiya
New Rheological Model for Soil Behavior, with Rodney J. Huang, GT7:July 74:807:10675
Dsc: Joram M. Amir, GT7:July 75:697:11398
Clo: GT6:June 76:649:12163
TR:141:97

Komar, Paul D.
Currents and Sand Transport on Beaches: A Review, Preprint No.2707, Apr 76, 27pp.
Longshore Currents and Sand Transport on Beaches, OE75:June 75:334
Oregon Coast Shoreline Changes Due to Jetties, with Jose Roman Lizarraga-Arciniega and Thomas A. Terich, WW1:Feb 76:13:11933

Komura, Saburo
Hydraulics of Slope Erosion by Overland Flow, HY10:Oct 76:1573:12489

Kondap, D. M.
Dsc, HY6:June 76:789:12164, of "Resistance to Flows in Alluvial Channels", HY6:June 75:665: 11352

Kondo, Hideo
Dsc, WW3:Aug 75:300:11473, of "Wave Transmission through Porous Structures", WW3: Aug 74:169:10714

Konishi, Ichiro
World's Third Longest Cantilever Bridge, CE:Feb 76: 84

Kono, Iichiro
The Equivalent Radius of a Source in Numerical Models of Groundwater Flow, NMG:June 76:II-1145

Konski, James L.
Problems in Route Selections for Variable Characteristics of Cyclists, BP75:Dec 75:261

Koons, Edwin R.
Peachtree City Path Experience: Conception to Implementation, BP75:Dec 75:186

Kopp, Eugene H.
See King S. Luk, EI2:Apr 74:105:10466

Koppel, Lowell B.
See Arthur R. Tarrer, EE3:June 76:657:12207

Korbin, Gregory E.
Model Study of Tunnel Prereinforcement, with Tor L. Brekke, GT9:Sept 76:895:12415

Korbonski, J. A.
Dsc, SDNPF:Dec 73:III-105, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81

Kornberg, Harry A.
Some Factors Affecting Land Use for Energy Centers, EFEEC:Aug 75:48

Kos, Peter
Transport Phenomena Applied to Sludge Dewatering, with Donald Dean Adrian, EE6:Dec 75:947:11781
Dsc: John H. Nebiker, EE6:Dec 76:1295:12583
TR:141:504

Kostem, Celal N.
See William S. Peterson, ST9:Sept 74:1980:10772

Kostrinsky, Mordekhai
See Ido Seginer, IR4:Dec 75:251:11752

Kothandaraman, Veerasamy
Dsc, with Ralph L. Evans, EE3:June 74:785:10564, of "Sewage Chlorination Versus Toxicity -- A Dilemma?", EE6:Dec 73:761:10190

Kotnick, George
Flue Gas Scrubbing at Eddystone Station, Preprint No.2779, Sept 76, 24pp.

Kotzias, Panaghiotis C.
Statistical Quality Control at Kastraki Earth Dam, with Aris C. Stamatopoulos, GT9:Sept 75:837:11552
Dsc: John D. Coumoulos, GT7:July 76:815:12224; James L. Sherard, GT7:July 76:816:12224
TR:141:441

Kounadis, Anthony N.
Dynamic Response of Cantilevers with Attached Masses, EM5:Oct 75:695:11616
Errata: EM2:Apr 76:370:12012
TR:141:392

Kouskoulas, Vasily
Predesign Cost-Estimation Function for Buildings, with Edward Kochn, CO4:Dec 74:589:10992
Dsc: Mark H. Jordan, CO3:Sept 75:670:11533
TR:141:89

Koutsoftas, Demetrious
In-Situ Undrained Shear Strength of Two Marine Clays, with Joseph A. Fischer, GT9:Sept 76:989:12431
See Joseph A. Fischer, OE75:June 75:1

Koutsopoulos, K. C.
Case Study of Carless Mobility Constraints, with Vasant H. Surti, TE4:Nov 76:745:12566

Kouwen, Nicholas
See Paul E. Wisner, HY2:Feb 75:243:11142
See Michael R. Garrett, WW76:Aug 76:650

Kovacs, William D.
Dsc, with Gerald A. Leonards, GT2:Feb 75:209:11087, of "Settlement of Building on Pile Foundation in Sand", GT3:Mar 74:265:10405

Kovalevsky, Leonid G.
Dsc, CO3:Sept 74:493:10768, of "Basic Construction Principles in Higher Latitudes", CO1:Mar 74:33:10399

Kovari, K.
Parametric Studies as a Design Aid in Tunneling, with H. Hagedorn and P. Fritz, NMG:June 76:II-773

Kozlowski, Michael Edwin
See Wen-Hsiung Li, EE4:Aug 74:837:10713

Kraeger, Brook A.
See Catalino B. Cecilio, HY10:Oct 74:1329:10851

Kraft, Klaus-Dieter
See Ekkehard Heinemann, PO1:Jan 76:53:11833

Kraft, Leland M., Jr.
See Osman I. Ghazzaly, OE75:June 75:490

Kraft, Walter H.
Planning and Development of Bicycle Facilities: Implementation Planning, with Carl M. Berkowitz, BP75:Dec 75:36
Round Table Discussion on Future Conferences, BP75:Dec 75:585
See Sam Kahan, TE3:Aug 76:507:12298

Krahn, John
Mechanics of the Frank Slide, with Norbert R. Morgenstern, GT76:Aug 76:309

Krajcinovic, Dusan
Rigid-Plastic Circular Plates on Elastic Foundation, EM2:Apr 76:213:12046

Krajewski, Wojciech A.
Structures for Power Stations in Ontario, Canada, PO2:Nov 76:179:12527

Kramer, Richard W.
Seismic Evaluation of Embankments, NMG:June 76:III-1445

Kranenburg, C.
Gas Release During Transient Cavitation in Pipes, HY10:Oct 74:1383:10892
Errata: HY8:Aug 75:1109:11470
TR:141:149

Kratz, Ralph H.
Dsc, CE:June 76:36, on Floating Dry Dock Doubles as Launching Platform, CE:May 75:74

Krause, Keith S.
Objectives of Water Quality Planning, HY3:Mar 75:471:11200
TR:141:284

Krawinkler, Helmut
Shear Behavior of Steel Frame Joints, with Vitelmo V. Bertero and Egor P. Popov, ST11:Nov 75:2317:11717
TR:141:470

Kray, Casimir J.
Design Concepts for Structural Steel Dolphins, ST76:Aug 76:661

Krishnamurthy, Muthusamy
Dsc, WW2:May 74:165:10509, of "Regime Equations and Tidal Inlets", WW3:Aug 73:393:9952

Krishnamurthy, Natarajan
Dsc, ST1:Jan 75:335:11039, of "High Strength Bolts Subject to Tension and Prying", ST2:Feb 74:351:10373

Krishnan, P.
Dsc, EE1:Feb 76:227:11876, of "Column Settling Tests for Flocculant Suspensions", EE3:June 75:309:11356

Krishnappan, B. G.
See Y. Lam Lau, HY3:Mar 75:560:11148

Krishnayya, Addanki V.G.
See Zdenek Eisenstein, NMG:June 76:II-1089

Kristek, Vladimir
Irregular Supports and Skew Diaphragms of Box Girders, ST5:May 74:917:10541

Dsc: Kuang-Han Chu, ST1:Jan 75:359:11039
Clo: ST7:July 75:1617:11401
TR:141:54

Krizek, Raymond J.
Dredged Material Confinement Facilities as Solid-Liquid Separation Systems, with Joseph A. FitzPatrick and Dimitrios K. Atmatzidis, DIEE:Jan 76:609
Evaluation of Stress Cell Performance, with M. Hassan Farzin, Anwar E.Z. Wissa and R. Torrence Martin, GT12:Dec 74:1275:11030
Errata: GT3:Mar 76:258:11949
TR:141:169
Soil-Structure Interaction of Concrete Pipe Systems, with Ross B. Corotis and Thomas H. Wenzel, ST76:Aug 76:607
Stabilization of Polluted Dredgings by Electro-Osmosis, with Francis B. Gularte and Paul L. Hummel, Preprint No.2641, Apr 76, 30pp.
Time-Dependent Development of Strength in Dredgings, with Abdelsalam M. Salem, Preprint No.2640, Apr 76, 28pp.
Water Quality Effects of a Dredging Disposal Area, with Brian J. Gallagher and Gabor M. Karadi, EE2:Apr 76:389:12040
See Zdenek P. Bazant, EM1:Feb 75:57:11138
See Zdenek P. Bazant, EM4:Aug 75:317:11508
See Max W. Giger, GT1:Jan 76:31:11842
See Abdelsalam M. Salem, GT2:Feb 76:139:11917
See Jack L. Rosenfarb, TN: GT2:Feb 76:188:11885
See Zdenek P. Bazant, EM2:Apr 76:225:12036
See M. Salah Abdelhamid, GT7:July 76:721:12240

Krogman, K. K.
See E. H. Hobbs, IR76:July 76:184

Krol, John J.P.
The Students Speak Out, CE:Apr 76:99
Dsc: R. A. Burnham, CE:Oct 76:26
The Students Speak Out—Part II, CE:May 76:102

Krone, Ray B.
Ultimate Fate of Suspended Material in Estuaries, DIEE:Jan 76:180
See Kandiah Arulanandan, GT1:Jan 75:51:11078
See Ranjan Ariathurai, HY3:Mar 76:323:11987

Krueger, Gordon P.
See John A. Richards, ST1:Jan 75:131:11056

Ku, Henry F.H.
See John Vecchioli, EE2:Apr 75:201:11232

Ku, Hsiao-Ching
See Allen R. Overman, EE2:Apr 76:475:12035

Kubo, James T.
Modal Analysis for Impact of Layered Plates, with Richard B. Nelson, EM1:Feb 75:45:11133
TR:141:185

Kudlick, Walter
Improving Downtown Circulation and Environment — Bring Back the Trolley Bus?, Preprint No.2810, Sept 76, 12pp.
See Edward E. Gilcrease, Jr., TE2:May 75:365:11314

Kuhner, Jochen
Hydraulic Collection and Disposal of Refuse, with Peter M. Meier, EE4:Aug 76:769:12296
Dsc, with Joseph J. Harrington, UP2:Nov 75:235:11676, of "Solid Waste Management: Equity Trade-Off Models", UP2:Nov 74:155:10913
Dsc, with Michael Shapiro, EE1:Feb 76:220:11876, of "Urban Runoff Pollution Control—State-of-the-Art", EE1:Feb 75:107:11129
See Michael Shapiro, EE6:Dec 76:1299:12583

Kulhawy, Fred H.
Analysis of Behavior of Edward Hyatt Power Plant, with Richard F. Flanagan, GT3:Mar 75:243:11161
TR:141:244
Load Transfer and Hydraulic Fracturing in Zoned Dams, with Thomas M. Gurtowski, GT9:Sept 76:963:12400
Dsc, with James L. Withiam, GT7:July 75:702:11398, of "Stress-Strain Properties of Compacted Clays", GT10:Oct 74:1123:10869
See James L. Withiam, GT10:Oct 76:1029:12483

Kulicki, John M.
See William S. Peterson, ST9:Sept 74:1980:10772

Kulin, Gershon
Dsc, HY10:Oct 76:1601:12440, of "Sediment Transport in Smooth Fixed Bed Channels", HY9:Sept 75:1139:11556

Kulka, Felix
See Tung. Y. Lin, CO3:Sept 75:491:11558

Kulkarni, Ram
See Wayne S. Smith, TE4:Nov 76:885:12511

Kulkarni, Vijaykumar K.
See Shrikrishna V. Chitale, HY10:Oct 75:1369:11600

Kundurpi, Prabhu S.
Stability of Cantilever Shells under Wind Loads, with Gopalacharyulu Samavedam and David J. Johns, EM5:Oct 75:517:11612
TR:141:369

Kunieda, Haruo
Parametric Resonance of Suspension Roofs in Wind, EM1:Feb 76:59:11899
Errata: EM6:Dec 76:1097:12584

Kuo, A. Y.
Renewal Characteristics of Chesapeake Bay, with Evon P. Ruzecki and Ching S. Fang, OE75:June 75:1065

Kuo, Ching Ton
The Effect of Wave Breaking on the Statistical Distribution of Wave Heights, ASCE:June 75:1211

Kuo, Edward Y.T.
Analytical Solution for 3-D Diffusion Model, EE4:Aug 76:805:12315
See J. D. Lin, OE75:June 75:1276

Kuo, John T.C.
See Conrad P. Heins, ST7:July 75:1481:11443

Kurdi, Ibrahim I.
See Thomas H. Hanna, GT10:Oct 74:1107:10854

Kurz, Johannes W.
See Roland M. Lewis, TE1:Feb 75:155:11110

Kurzweil, Alan D.
See Conrad P. Heins, ST6:June 76:1213:12219

Kusmez, Kadir M.
Fatigue Provisions of AASHTO Specifications, with Chi C. Tung, ST9:Sept 76:1725:12385

Kuzmanovic, Bogdan O.
History of the Theory of Bridge Structures, Preprint No.2738, Sept 76, 32pp.

Kypke, Dean A.
Tension Leg Platforms: Design and Performance, with Leonardo Perez y Perez, Preprint No.2698, Apr 76, 30pp.

Laak, Rein
See Kent A. Healy, EE5:Oct 74:1133:10882

Laba, Jan T.
See Khandker A. Aziz, GT8:Aug 76:825:12316

Labadie, John W.
Automatic Control of Large-Scale Combined Sewer Systems, with Neil S. Grigg and Bruce M. Bradford, EE1:Feb 75:27:11115
TR:141:224
See Harry G. Wenzel, Jr., WR1:Apr 76:117:12070

Labanieh, S.
See F. Darve, NMG:June 76:I-264

LaBastie, James G.
See David E. Pauls, GT76:Aug 76:182

Lacher, Hannes
Dsc, IR1:Mar 76:169:11951, of "Solutions for Unconfined Non-Darcy Seepage", IR1:Mar 75:53:11203

Ladanyi, Branko
Dsc, GT7:July 76:821:12224, of "Quasi-Static Deep Penetration in Clays", GT11:Nov 75:1119:11706

Ladd, Charles C.
New Design Procedure for Stability of Soft Clays, with Roger Foott, GT7:July 74:763:10664
Dsc: Alfred A. Seymour-Jones, GT1:Jan 75:81:11037; Gholamreza Mesri, GT4:Apr 75:409:11208
Clo: GT11:Nov 75:1169:11674
TR:141:1
Dsc, GT75:June 75:II-153, of "Measurement of In Situ Strength", GT75:June 75:II-57
See Roger Foott, CE:Oct 76:96

Ladd, Richard S.
Specimen Preparation and Cyclic Stability of Sands, Preprint No.2752, Sept 76, 28pp.
Dsc, with Marshall L. Silver, GT8:Aug 75:827:11469, of "Soil Liquefaction by Torsional Simple Shear Device", GT8:Aug 74:871:10752
See Marshall L. Silver, GT5:May 76:511:12145

Lade, Poul V.
Elastoplastic Stress-Strain Theory for Cohesionless Soil, with James M. Duncan, GT10:Oct 75:1037:11670
Dsc: Roger C. Harvey, Eldon Burley and Arthur W.T. Daniel, GT6:June 76:662:12163; Adel S. Saada, GT7:July 76:819; Michael J. Pender, GT11:Nov 76:1202:12507
Errata: GT3:Mar 76:270:11949
TR:141:484
Interpretation of Torsion Shear Tests on Sand, NMG:June 76:I-381
Stress-Path Independent Behavior of Cohesionless Soil, with James M. Duncan, GT1:Jan 76:51:11841
See Jean-Marie J. Vagneron, NMG:June 76:III-1329

Lagace, Robert
The Guyon Model and the Experimental Subsurface Drainage Behaviour, with Gilbert Sylvestre, IR76:July 76:229

Lagasse, Peter F.
Impact of Dredging on River System Morphology, with Daryl B. Simons, WW76:Aug 76:434
Thalweg Disposal of Riverine Dredged Material, with Daryl B. Simons and Yung H. Chen, DIEE:Jan 76:556

Lager, John A.
See Richard Field, EE1:Feb 75:107:11129
See Richard Field, CE:Oct 76:101

LaGrasse, Carol W.
Dsc, Policy Protest, CE:Aug 76:28

Lai, Chintu
Dsc, HY12:Dec 76:1777:12586, of "Skin Friction in Unsteady Laminar Pipe Flow", HY1:Jan 76:41:11867

Lai, James S.
See Thomas H. Crawford, BP75:Dec 75:278

Lai, K. K.
See Robert J. Keller, HY4:Apr 74:553:10501

Laier, James E.
See Joseph H. Lamar, DIEE:Jan 76:882

Lakshmanan, Narayanan
See David J. Victor, ST7:July 76:1337:12249

Lakshmana Rao, Nagar S.
See D. Chandrasekaran, HY11:Nov 76:1677:12560

Lakshmipathy, M.
Dsc, with Arumbakkam R. Santhakumar and M. Arockiasamy, ST12:Dec 76:2385:12588, of "Analysis of Reinforced Fibrous Concrete Beams", ST1:Jan 76:177:11847

Lam, Aaron T.B.
See Hal B.H. Cooper, Jr., EE4:Aug 76:723:12312

Lam, Tenny
See Robert Herman, TE2:May 75:311:11332

Lamar, Joseph H.
Experience in Using Dredge Material for Construction Purposes, with James E. Laier, DIEE:Jan 76:882

Lamberti, H. V.
Dsc, CE:Dec 75:32, on Reforming Civil Engineering Education, CE:July 75:61

Lance, J. Clarence
Fate of Nitrogen in Sewage Effluent Applied to Soil, IR3:Sept 75:131:11570
TR:141:467

Landon, Ronald A.
Hydrogeology and Water Quality Management, HY2:Feb 75:285:11137
TR:141:224

Lane, Dennis D.
Dispersion of Pollutants in Automobile Wakes, with James J. Stukel, EE3:June 76:571:12189

Lane, Kenneth S.
Field Test Sections Save Cost in Tunnel Support, FTTC:Oct 75

Lane, Leonard J.
Dsc, with Herbert B. Osborn, IR3:Sept 75:237:11536, of "Weather Modification for Use in High Plains", IR3:Sept 74:339:10816

Lane, William L.
A Stochastic Approach to the Colorado River Basin, with Albert E. Gibbs and Robert B. Main, Preprint No.2684, Apr 76, 26pp.

Lang, Martin
Sewering the City of New York, with Charles Samowitz, Mohan Jethwani and Frederick Novotny, CE:Jan 76:54

Langberg, Simon M.
Security, Safety and Related Aspects of Pedestrian Design for the New Eleventh Street Station of the Philadelphia Center City Commuter Rail Connection, BP75:Dec 75:516

Langdon, Charles H., III
See Benjamin C. Dysart, III, IR76:July 76:56

Langland, Robert T.
Three-Dimensional FE Analysis of a Room and Pillar Coal Mine (A Comparison with Experiment), NMG:June 76:II-802

Langley, H. I.
Bedload Sampling by Pumping, WW76:Aug 76:945

Lankard, David R.
Pavement Applications for Steel Fibrous Concrete, with Alvin J. Walker, TE1:Feb 75:137:11108
TR:141:122

Lanning, Cortland C.
Application of Acoustic Velocity Flowmeters, with Robert W. Ehrhart, Preprint No.2716, Apr 76, 19pp.

Lardieri, Armando C.
Flood Proofing Regulations for Building Codes, HY9: Sept 75:1155:11576
TR:141:428

Larkin, Edward P.
Persistence of Virus on Sewage-Irrigated Vegetables, with John T. Tierney and Robert Sullivan, EE1:Feb 76:29:11935
Dsc: Paul Fleming, EE6:Dec 76:1302:12583

Larkin, Franklin J.
Past and Future of Construction Equipment — Part I, with Stuart Wood, Jr., CO2:June 75:309:11391
TR:141:325

Larrabee, Richard D
Thermal Loading of Thin-Shell Concrete Cooling Towers, with David P. Billington and John F. Abel, ST12:Dec 74:2367:11002
Dsc: M. N. Viswanathan, ST7:July 75:1625:11401
Clo: ST3:Mar 76:679:11952
TR:141:128

Larsen, Harold T.
Award Honors Harold Larsen, CE:Nov 76:83

Larsen, Peter A.
Dsc, EE3:June 76:690:12161, of "Dynamic Response of Settling Basins", EE5:Oct 75:741:11609

Larson, George R.
Dsc, CE:Mar 76:26, on Local Land Use Control Over Critical Areas, CE:Sept 75:73

Larson, John W.
Construction of Pueblo Dam, CO4:Dec 75:883:11769
TR:141:493

Larson, Lory E.
See Victor J. Schuler, EE6:Dec 75:897:11756

Larson, Marvin A.
Plastic Design of Web Openings in Steel Beams, with Kirit N. Shah, ST5:May 76:1031:12155
Dsc, ST12:Dec 74:2532:10977, of "Composite Steel-Concrete Construction", ST5:May 74:1085:10561

Larson, Thomas D.
See Srikanth Rao, Preprint No.2768, Sept 76, 24pp.

Larson, Valdemar F.
See Robert R. Knapp, OE75:June 75:784

LaSeur, William V.
See Jimmy R. Williams, HY9:Sept 76:1241:12377

Lassabliere, Jacques
See Nancy L. Nihan, TE3:Aug 76:555:12317

Laszewski, Edwin J.
Dsc, HY3:Mar 76:446:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75: 847:11445

Latrobe, Benjamin H.
Benjamin Latrobe: Helping Cleanse America, CE:July 76:80

Lau, Daniel H.
See Hubert J. Morel-Seytoux, EE5:Oct 75:859:11596

Lau, Y. Lam
Dsc, HY7:July 74:1079:10635, of "Extreme Roughness of Natural River Channel", HY7:July 73:1027:9831
Dsc, with B. G. Krishnappan, HY3:Mar 75:560: 11148, of "Transverse Dispersion in Oscillatory Channel Flow", HY6:June 74:755:10589

Laumans, Quirin
Calculation of Raft Foundations on Clayey Silts, with Hermann Schad, NMG:June 76:I-475

Laurenson, Eric M.
See Russell G. Mein, HY11:Nov 74:1507:10933

Laursen, Emmett M.
Dsc, HY1:Jan 75:208:11038, of "Estimation of Washload Produced on Certain Small Watersheds", HY7:July 74:835:10638
Dsc, HY2:Feb 75:321:11088, of "Optimal Design for Highway Drainage Culverts", HY7:July 74:971: 10676
See Kenneth G. Renard, HY5:May 75:511:11315

Lavania, B. V.K.
Tehri Rockfill Dam, GT9:Sept 75:963:11587
TR:141:454

La Violette, Paul E.
Surface Currents in the Arctic and Sub-Arctic Seas as Deduced from Satellite Photographs of Ice Floes, OE75:June 75:1166

Law, Frederick M.
Thinking Aesthetically is a Part of Structural Engineering, ST76:Aug 76:1

Law, K. T.
Analysis of Shear-Induced Anisotropy in Leda Clay, with Kwan Y. Lo, NMG:June 76:I-329

Law, Steven T.C.
See Zdenek Eisenstein, NMG:June 76:II-1089

Lawrance, Charles H.
Estimated Indirect Cost of Urban Water Use, EE4: Aug 75:517:11482
TR:141:364
Major Junction Structure Verified by Modeling, with Munson W. Dowd, HY4:Apr 76:499:12066

Lawrence, Alonzo W.
See Joseph H. Sherrard, EE6:Dec 73:773:10220

Lawrence, Christopher
Dsc, Digital Coastal Data, CE:Dec 76:26

Lawrence, J. Richard
See Greer W. Ferver, Preprint No.2651, Apr 76, 10pp.

Lawson, R. M.
Dsc, ST5:May 76:1168:12093, of "Buckling Formulas for Corrugated Metal Shear Diaphragms", ST7:July 75:1403:11429

Layton, Ronald F.
Dsc, EE5:Oct 76:1134:12436, of "Disease Risks of Occupational Exposure to Sewage", EE2:Apr 76: 375:12038

Le, Anh-Tuan
Dsc, ST5:May 76:1165:12093, of "Prestressed Box Beams under Combined Loading", ST7:July 75: 1313:11421

Leach, Lowell E.
See Carl G. Enfield, EE6:Dec 75:911:11775

Leake, Gerald R.
Entropy Model and Intercity Modal Split in the UK, with John R. Underwood, TE2:May 76:215:12110

Lean, G. H.
Dsc, with M. J. Crickmore, HY4:Apr 75:429:11209, of "Stochastic Analysis of Dune Bed Profiles", HY7:July 74:849:10657

Lebovic, Thomas
Dsc, Innovations in Public Transit, CE:Nov 76:36

Lebre, Robert N.
Construction of FFTF Containment Vessel and Lock, CO2:June 76:325:12177

Ledbetter, Joe O.
Dsc, EE6:Dec 76:1310:12583, of "Disease Risks of Occupational Exposure to Sewage", EE2:Apr 76:375:12038

Lee, Baum K.
Stochastic Analysis of Dune Bed Profiles, with Harvey E. Jobson, HY7:July 74:849:10657
Dsc: G. H. Lean and M. J. Crickmore, HY4:Apr 75:429:11209
Clo: HY11:Nov 75:1445:11672
TR:141:93

Lee, C. F.
Finite Element Study of a Shallow Tunnel in Rock Exhibiting Clay-Induced Anisotropy, with Kwan Y. Lo, NMG:June 76:II-834
Rock Squeeze Study of Two Deep Excavations at Niagara Falls, with Kwan Y. Lo, GT76:Aug 76:116

Lee, Clyde E.
See R. B. Machemehl, TE4:Nov 75:681:11716

Lee, Douglas R.
See John D. Bossler, SU1:Oct 75:115:11657

Lee, G. Fred
Evaluation of the Factors Influencing the Results of the Elutriate Test for Dredged Material Disposal Criteria, with Jose M. Lopez and M. D. Piwoni, DIEE:Jan 76:253

Lee, George C.
See Wilfred W. Recker, EI1:Jan 76:55:11862

Lee, Homa J.
See Richard M. Beard, OE75:June 75:470

Lee, Ian K.
See Somasundaram Valliappan, NMG:June 76:II-1013

Lee, Jiin-Jen
Oscillations in Harbors Containing Islands, OE75:June 75:632

Lee, Kenneth L.
The Hawkins Hydraulic Fill Dam, with Wolfgang Roth, Preprint No.2662, Apr 76, 20pp.
Liquefaction Potential at Ekofisk Tank in North Sea, with John A Focht, Jr., GT1:Jan 75:1:11054
Dsc: John D. Mettam, GT8:Aug 75:836:11469
Clo: GT1:Jan 76:113:11816
TR:141:6
Properties of Soil in the San Fernando Hydraulic Fill Dams, with H. Bolton Seed, Izzat M. Idriss and Faiz I. Makdisi, GT8:Aug 75:801:11527
TR:141:416
Soil Strength Improvement Through Reinforcement, Preprint No.2806, Sept 76, 28pp.
Static Stresses by Linear and Nonlinear Methods, with Izzat M. Idriss, GT9:Sept 75:871:11542
TR:141:429
See Gregory N. Richardson, GT2:Feb 75:167:11143
See H. Bolton Seed, GT7:July 75:651:11449
See H. Bolton Seed, GT9:Sept 75:889:11541
See Jean Binquet, GT12:Dec 75:1241:11792
See Jean Binquet, GT12:Dec 75:1257:11793
See Marshall L. Silver, GT5:May 76:511:12145
See Jean-Marie J. Vagneron, NMG:June 76:III-1329
See Mokhtar Annaki, Preprint No.2752, Sept 76, 28pp.
See John A. Focht, Jr., CE:Oct 76:97

Lee, Kwang K.
See Harold John Day, WR1:Apr 76:77:12059

Lee, Kwok Wing
See W. D. Liam Finn, NMG:June 76:I-270
See W. D. Liam Finn, Preprint No.2752, Sept 76, 30pp.

Lee, Larry T.
Engineering Risk Management of Natural and Man-Made Hazards, with Jon D. Collins, Preprint No.2757, Sept 76, 30pp.

Lee, Louis J.
Sea Cliff Base Erosion, San Diego, California, with Charles Pinckney and Charles Bemis, Preprint No.2708, Apr 76, 14pp.

Lee, Peter C.Y.
See Yung-shih Wang, EM4:Aug 74:719:10720

Lee, R. D.
Ju'aymah Crude Oil Loading Terminal, Preprint No.2642, Apr 76, 22pp.

Lee, Seng-Lip
See Chesada Kasemset, EM5:Oct 74:965:10881

Lee, Theodore T.
Marine Alternatives for Rapid Transit in Hawaii, WW76:Aug 76:107

Lee, William W.L.
Systems Analysis in Evaluating the Economics of New and Maintenance Dredging Projects, DIEE:Jan 76:364

Leffel, R. Ernest
Civil Engineering Calculations Using SI Units, EI1:Jan 76:99:11875

Legas, James
See James R. Graham, CO2:June 75:281:11387

Legget, Robert F.
Robert F. Legget Elected to Honorary Membership, CE:Oct 76:95

Lehman, Frederick G.
Dsc, CE:Dec 75:30, on Engineering Education: Can It be More Practical?, CE:July 75:60
Dsc, CE:Dec 75:30, on Reforming Civil Engineering Education, CE:July 75:61

Lehman, Lawrence H.
Genesee Expressway Corridor Analysis, with Robert J. Trapani and Philip A. Habib, TE4:Nov 75:781:11726
TR:141:457
Landmark Erie Canal Structure Rehabilitated, with Bertram Shapiro and Robert J. Trapani, CE:Oct 76:62

Leifer, Samuel A.
See Robert Alperstein, GT5:May 76:539:12154

Leipholz, Horst H.E.
Aspects of Dynamic Stability of Structures, EM2:Apr 75:109:11229
TR:141:207

Le Mehaute, Bernard
Similitude in Coastal Engineering, WW3:Aug 76:317:12293

Lemons, Roy D.
See Vernon McKenzie, EFAN:Dec 74:108

Lenow, Martin
The Resurgence of Light Rail Transit, TE2:May 76:229:12131

Leon, Federico J.
Dsc, GT10:Oct 76:1119:12439, of "Failures in Limestones in Humid Subtropics", GT8:Aug 75: 771:11521

Leonard, John W.
Doubled-Curved Element for Mooney-Rivlin Membranes, with Vijay K. Verma, EM4:Aug 76: 625:12333

Leonards, Gerald A.
Dsc, GT7:July 75:700:11398, of "Differential Settlement of Buildings", GT9:Sept 74:973:10802
See William D. Kovacs, GT2:Feb 75:209:11087

Lepore, John A.
Energy Conservation in Housing Construction, with Noam Lior and Sidney Shore, Preprint No.2781, Sept 76, 30pp.

Lerner, Lawrence
New York Offshore Airport Feasibility Study, Preprint No.2634, Apr 76, 25pp.

LeSchack, Leonard
How the Soviets Build on Permafrost, with Reuben Kachadoorian, CE:Apr 75:57
TR:141:151

Le Sciellour, G. F.
Dsc, CO3:Sept 75:674:11533, of "Diaphragm Wall Construction Techniques", CO4:Dec 74:605:11025

Lesleighter, Eric J.
Dsc, HY2:Feb 75:319:11088, of "Developing Region in Self-Aerated Flows", HY4:Apr 74:553:10501

Letelier S., Mario F.
Skin Friction in Unsteady Laminar Pipe Flow, with Hans J. Leutheusser, HY1:Jan 76:41:11867
Dsc: Chintu Lai, HY12:Dec 76:1777:12586

LeTellier, Carroll N.
Dsc, CE:June 75:24, on Affirmative Action Toward Equal Opportunity, CE:Feb 75:69

Letter, Joseph V., Jr.
See William H. McAnnaly, Jr., Preprint No.2661, Apr 76, 27pp.

Letterman, Raymond D.
See Rafael Andreu-Villegas, EE2:Apr 76:251:12032

Leutheusser, Hans J.
Extreme Roughness of Natural River Channel, with W. Orville Chisholm, HY7:July 73:1027:9831
Dsc: Y. Lam Lau, HY7:July 74:1079:10635; Omkar N. Wakhlu, HY10:Oct 74:1484:10839; Charles R. Neill, HY3:Mar 75:538:1148
Clo: HY9:Sept 75:1275:11535
TR:141:14
See Mario F. Letelier S., HY1:Jan 76:41:11867

Levine, Philip
Dsc, Welding Certification, CE:Oct 76:28

Levinson, Herbert S.
Resolving Conflicts Between People and Cars, BP75: Dec 75:97

Levitsky, Myron
Form Pressure and Relaxation in Formwork, EM3: June 75:267:11379
TR:141:257

LeVitt, R. Richard
New Methods in Construction Systems, CO3:Sept 74:211:10788
Dsc: John R. Christofferson, CO1:Mar 75:231: 11147
Clo: CO3:Sept 75:666:11533
TR:141:45

Levitt, Raymond E.
Reducing Construction Accidents—Top Management's Role, with Henry W. Parker, CO3: Sept 76:465:12384

Lew, Marshall
See Gary C. Hart, ST2:Feb 75:397:11126

Lewandowski, Edward R.
Federal Manpower in Water Resource Engineering, WR2:Nov 76:185:12533

Lewinger, Keith L.
Data Reduction Methods for Hydrologic Analysis, with Daniel P. Loucks and Edward A. McBean, HY1:Jan 75:17:11053
TR:141:186

Lewis, Gary L.
Sediment Control at Streamside Power Plants, with Ralph R. Marlette, WW76:Aug 76:1592
See Michael A. Stevens, HY5:May 76:637:12115

Lewis, Lloyd F.
Oceanographic Survey in Support of FNPP-AGS Site, OE75:June 75:9

Lewis, Roland M.
Integrated Grant Administration Program, with Johannes W. Kurz, TE1:Feb 75:155:11110
TR:141:131

Lewis, Roland W.
Non-Linear Flow and Deformation Analysis of Consolidated Problems, with G. W. Roberts and Olgierd C. Zienkiewicz, NMG:June 76:II-1106
See John C. Bruch, Jr., NMG:June 76:I-115

Lewis, Walter E.
Changes in Socioeconomic Considerations, UP1:Aug 76:29:12355

Li, Alex
See Paul J. Ossenbruggen, TE3:Aug 76:585:12314

Li, Ruh-Ming
Morphology of Cobble Streams in Small Watersheds, with Daryl B. Simons and Michael A. Stevens, HY8:Aug 76:1101:12304
On Kinematic Wave Approximation for Flood Routing, with Daryl B. Simons, Larry S. Shiao and Yung H. Chen, WW76:Aug 76:377
Probabilistic Approach to Design of Riprap for River Bank Protection, with Daryl B. Simons, Paul H. Blinco and Md. Abdus Samad, WW76:Aug 76:1572
Solid Particle Settlement in Open-Channel Flow, with Hsieh W. Shen, HY7:July 75:917:11460
Dsc: Subhash C. Mehrotra, HY1:Jan 76:128: 11817; Mehmetcik Bayazit, HY6:June 76:805: 12164; B. Mutlu Sumer, HY6:June 76:806: 12164; Joseph R. Reed, HY7:July 76:1066: 12225
TR:141:397
Solutions to Green-Ampt Infiltration Equation, with Michael A. Stevens and Daryl B. Simons, IR2:June 76:239:12196

Li, Shu-T'ien
Basic Construction Principles in Higher Latitudes, CO1:Mar 74:33:10399
Dsc: Altaf Hussain, CO2:June 74:192:10563; Leonid G. Kovalevsky, CO3:Sept 74:493:10768; Glenn E. Reynolds, CO4:Dec 74:651:10970; W. R. Rogers, CO4:Dec 74:652:10970; Ronald M. Grider, CO4:Dec 74:653:10970; Sandor Popovics, CO4:Dec 74:654:10970; Charles J. Blascsok, CO1:Mar 75:226:11147; Tsung-Lien Chou, CO1:Mar 75:227:11147
Clo: CO3:Sept 75:663:11533
TR:141:12
Dsc, CO4:Dec 76:700:12582, of "Education for Construction", CO2:June 76:347:12182

Li, Wen-Hsiung
DO-Sag in Oscillating Flow, with Michael Edwin Kozlowski, EE4:Aug 74:837:10713
Dsc: Peter R.B. Ward and F. Koch, EE3:June 75: 455:11337
Clo: EE6:Dec 75:1034:11741
TR:141:140

Liang, Nai Kuang
Estimation of Wave Spreading Factor and Significant Wave Direction, OE75:June 75:1124

Liang, Tung
See Kwang-Ping Yang, HY1:Jan 75:167:11080

Liaw, C-Y.
See Anil K. Chopra, ST7:July 75:1349:11422

Libove, Charles
Two Means of Alleviating Rush-Hour Crowding, TE4:Nov 73:845:10144
Dsc: William Vickrey, TE2:May 75:395:11272
Clo: TE4:Nov 75:831:11673
TR:141:32
See Lung-Hsiang Wu, ST11:Nov 75:2205:11714
See M. Iqbal Hussain, ST5:May 76:1109:12159

Lieberman, Arthur Z.
See William D. Haseman, HY3:Mar 75:477:11185

Liebman, Jon C.
Minimum Cost in Residential Refuse Vehicle Routes, with James W. Male and Magne Wathne, EE3:June 75:399:11368
TR:141:346
Dsc, with Lewis A. Rossman, EE1:Feb 75:181:11085, of "Optimization of Urban Air Monitoring Networks", EE3:June 74:577:10577
See Larry W. Mays, WR2:Nov 76:385:12580

Lienesch, William C.
Planning and Implementation under Section 208, with Gerald A. Emison, WR2:Nov 76:283:12556

Liggett, James A.
See J. Denis Newbold, EE1:Feb 74:41:10346
See Jean A. Cunge, HY4:Apr 75:431:11209
See Keith W. Bedford, EM6:Dec 75:803:11807
See Der-Liang Young, EM1:Feb 76:1:11903
See Der-Liang Young, EM6:Dec 76:1009:12643

Ligon, James T.
See Donald B. Stafford, TE1:Feb 76:117:11925

Lim, Henry C.
See Arthur R. Tarrer, EE3:June 76:657:12207

Lim, S. J.
See Osman I. Ghazzaly, OE75:June 75:490

Lima, Peter M.
Dsc, UP2:Nov 74:205:10902, of "Quantifying Impact of Transportation Systems", UP1:Mar 74:79:10416

Limpert, Fred A.
Water and Electric Power in the Pacific Northwest, EFEEC:Aug 75:80

Lin, Cheng-Shung
Nonlinear Analysis of RC Shells of General Form, with Alexander C. Scordelis, ST3:Mar 75:523: 11164
Dsc: Yoav Sarne, ST11:Nov 75:2457:11675
Clo: ST9:Sept 76:1951:12366
TR:141:6
1976 Moisseif Award Presented, with Alexander C. Scordelis, CE:Oct 76:97

Lin, Hsin-Chi
See Chao-Lin Chiu, HY2:Feb 76:185:11905

Lin, J. D.
Friction Effects on Spatially Varied Open Channel Flows with Increasing Discharge, with Victor E. Scottron and Hsiang Kuei Soong, WW76:Aug 76: 1517
Pressure Field at Deep Depth due to Surface Motion, with Edward Y.T. Kuo, OE75:June 75:1276
Dsc, EM5:Oct 74:1055:10837, of "Open-Channel Flow Equations Revisited", EM5:Oct 73:979:10073

Lin, Jung-Tai
See Daniel T.-L. Chan, HY5:May 76:615:12141

Lin, Sheng S.
See Tien H. Wu, GT9:Sept 75:913:11584

Lin, Shundar
Dsc, EE3:June 74:786:10564, of "Sewage Chlorination Versus Toxicity -- A Dilemma?", EE6: Dec 73:761:10190

Lin, T. Y.
Lin Honored by Colleagues, CE:June 76:82
Symposium Honors T.Y. Lin, CE:Aug 76:71

Lin, Tung D.
See Eduardo Salse, ST1:Jan 76:51:11835

Lin, Tung. Y.
Fifty-Year Advancement in Concrete Bridge Construction, with Felix Kulka, CO3:Sept 75:491: 11558
TR:141:373

Lind, Niels C.
Approximate Analysis and Economics of Structures, ST6:June 76:1177:12201
Empirical Effective Width Formula, with Mayasandra K. Ravindra and Gerald Schorn, ST9:Sept 76:1741: 12426
Utilization of Cold Work in Cold-Formed Steel, with Dilip K. Schroff, ST1:Jan 75:67:11043
TR:141:145
See Mayasandra K. Ravindra, ST9:Sept 74:1789: 10779
See Wilfred W.C. Siu, ST7:July 75:1469:11404
See Sree R. Parimi, ST3:Mar 76:475:12009

Lindholm, Ernest A.
See James R. Graham, CO2:June 75:281:11387

Lindholm, Oddvar Georg
Pollutional Analysis of Combined Sewer Systems, EE2:Apr 76:301:12030

Lindner, Ernest N.
Swelling Rock: A Review, GT76:Aug 76:141

Linneman, Clavin C., Jr.
See C. Scott Clark, EE2:Apr 76:375:12038

Linsley, Ray K.
Hydrology and Water Resources Planning in America: 1776 to 1976, Preprint No.2754, Sept 76, 12pp.
Two Centuries of Water Planning: A Review of the Development of Methodology, Preprint No.2754, Sept 76, 10pp.
Dsc, CE:Aug 76:24, on Ethics: Wisconsin Section Sparks Timely Discussion, CE:May 76:90

Linthacum, Wayne W.
Transportation Corridor Planning for Arizona Regional Airport, TE3:Aug 75:415:11478
TR:141:276

Linthurst, Rick A.
See Robert J. Reimold, TE2:May 75:189:11293

Lior, Noam
See John A. Lepore, Preprint No.2781, Sept 76, 30pp.

Liou, Chyr Pyng
A Numerical Model for Liquefaction, with Victor L. Streeter and Frank E. Richart, Jr., Preprint No.2752, Sept 76, 30pp.

Lipson, Samuel L.
Weight Optimization of Plane Trusses, with Krishna M. Agrawal, ST5:May 74:865:10521
Dsc: Manhar C. Thakkar, ST2:Feb 75:440:11089
Clo: ST8:Aug 75:1709:11471
TR:141:47

Liseth, Paul
Wastewater Disposal by Submerged Manifolds, HY1: Jan 76:1:11839

Litchfield, James W.
See Kenneth F. Reinschmidt, EI2:Apr 75:117:11248

Litle, William A.
See Albert G.H. Dietz, CO2:June 76:347:12182

Little, A. L.
Dsc, CO2:June 75:453:11336, of "Stability of Trenches Filled with Fluids", CO4:Dec 74:533: 11006
Dsc, CO2:June 75:455:11336, of "Diaphragm Wall Construction Techniques", CO4:Dec 74:605:11025

Little, John R., Jr.
Liability of the United States Under the Federal Tort Claims Act (28 U.S.C. ¶¶ 1346(b), 2672-80), EFRLD:Sept 75:121

Little, William C.
Stability of Channel Beds by Armoring, with Paul G. Meyer, HY11:Nov 76:1647:12519

Litvin, David M.
See Tapan K. Datta, TE4:Nov 75:707:11708

Litwin, Yoram J.
Dsc, with Erhard F. Joeres, EE3:June 75:449:11337, of "Water Quality Models Using the Box-Jenkins Method", EE3:June 74:733:10629

Liu, Francis C.
Kink Formation and Rotational Response of Single and Multistrand Electromechanical Cables, OE75: June 75:546

Liu, G. S.
Study on the Wind-Wave Characteristics in Model Harbor, with Frederick L.W. Tang, OE75:June 75: 706

Liu, Hua-An
See Gary C. April, DIEE:Jan 76:833

Liu, L. K.
Dsc, SDNPF:Dec 73:III-51, of "Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities", SDNPF:Dec 73:III-19
Dsc, SDNPF:Dec 73:III-101, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81

Liu, Pei-Chung
See Ken P. Chong, Preprint No.2807, Sept 76, 22pp.

Liu, Philip L-F.
Dsc, WW2:May 75:221:11274, of "Nonlinear Wave Forces on Halfcylinder and Hemisphere", WW3: Aug 74:189:10710
See Chiang C. Mei, WW3:Aug 74:217:10754

Liu, Robert
See Will Gersch, EM5:Oct 76:883:12464

Liu, Shih-Chi
Optimal Aseismic Design of Building and Equipment, with M. R. Dougherty and F. Neghabat, EM3:June 76:395:12208

Liu, Thomas K.
See Wesley E. Stimpson, GT76:Aug 76:1

Liu, Yu-Nan
See Einar Dahl-Jorgensen, TE1:Feb 75:29:11101

Livneh, Moshe
See Jacob Greenstein, TE4:Nov 75:737:11690

Lizarraga-Arciniega, Jose Roman
See Paul D. Komar, WW1:Feb 76:13:11933

Lo, David L.C.
Dynamic Buckling of Shallow Arches, with Ernest F. Masur, EM5:Oct 76:901:12493
Use of Computers in Transmission Tower Design, with Andrew Morcos and Surendra K. Goel, ST7: July 75:1443:11410
TR:141:323
See Edwin C. Rossow, ST4:Apr 75:839:11257

Lo, Kevin K.
See Hung L. Wong, EM4:Aug 76:671:12328

Lo, Kwan Y.
See K. T. Law, NMG:June 76:I-329
See C. F. Lee, NMG:June 76:II-834
See C. F. Lee, GT76:Aug 76:116

Loane, Edward
See Franklyn Rogers, CE:Oct 76:100

Lobdell, Larry W.
See Gerald R. Thiers, GT76:Aug 76:283

Locher, Frederick A.
See Eduard Naudascher, HY2:Feb 74:295:10347

Lockhart, Woody
Pilots Evaluation of the D/FW Airport, EFAN:Dec 74:201

Lockwood, Charles W.
Diversion of Water through Northfield Mt. Pumped Storage Project, WR1:Apr 76:49:12075

Lockwood, R. Addis
See Nancy E. Folks, EE4:Aug 75:607:11518
See Kenneth Y. Chen, EE2:Apr 76:347:12023

Lockwood, Stephen C.
An Issue-Based Land-Use Planning Process, UP1:Aug 76:41:12341

Loeb, Laurence
The Human Potential Movement, CE:Jan 76:66

Loeffler, Frank J.
Retired ASCE Draftsman Dies, CE:Dec 76:82

Loehr, Raymond C.
See Dale R. Baker, EE5:Oct 75:759:11641
See Embar G. Srinath, EE2:Apr 76:449:12041

Loftus, William F.
Dsc, CE:Dec 75:52, on Protecting Your Firm against Liability Claims, CE:June 75:66

Logan, Glen R.
See Dan M. Fults, WR1:Apr 76:63:12063

Loganathan, Paripurnanandan
See Kandiah Arulanandan, GT1:Jan 75:51:11078

Logcher, Robert D., Chmn.
The State-of-the-Art of Computer Graphics Applications in Structural Engineering, ST3:Mar 75:459:11158
TR:141:202

Lokken, Edwin C.
Concrete Walls for Highway Noise Reduction, TE4: Nov 76:637:12534
See Gordon K. Ray, TE4:Nov 75:721:11725

Long, Leonard O.
Dsc, GT10:Oct 76:1125:12439, of "A Case History of Expansive Claystone Damage", GT9:Sept 75: 933:11590

Long, Norbert C.
See Claude N. Strauser, WW2:May 76:281:12095

Long, Robert R.
Applications of Mixing Experiments to Estuaries, OE75:June 75:1400

Long, Stuart B.
See James V. Hamel, GT76:Aug 76:217

Longinow, Anatole
See Neal FitzSimons, ST7:July 75:1367:11431

Longworth, Jack
See Sumio Hamada, ST11:Nov 74:2205:10917
See Ricardo O. Foschi, ST12:Dec 75:2537:11766
See Sumio Hamada, ST7:July 76:1463:12267

Looper, Joseph H.
I-70 Glenwood Canyon — Design Concept, TE2: May 76:201:12138

Lopez, Jose M.
See G. Fred Lee, DIEE:Jan 76:253

Lopez, Leonard A.
FILES: Automated Engineering Data Management System, ST4:Apr 75:661:11241
TR:141:251

Lord, Arthur E., Jr.
See Robert M. Koerner, GT7:July 76:761:12239

Lord, Charles J.
See Lloyd J. Weverka, OE75:June 75:732

Lord, William D.
See Gajanan M. Sabnis, Preprint No.2746, Sept 76, 30pp.

Lorenzen, Marc W.
See Arlo W. Fast, EE6:Dec 76:1161:12628
See Arlo W. Fast, EE6:Dec 76:1175:12629

Losberg, Anders
See Lennart Elfren, ST8:Aug 74:1657:10749
See Ingvar H.E. Nilsson, ST6:June 76:1229:12222

Lott, James L.
Dsc, EM2:Apr 75:156:11207, of "Probabilistic Analysis of Fiber-Reinforced Concrete", EM2:Apr 74:397:10491

Lou, W.
Dsc, SDNPF:Dec 73:III-99, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81

Loucks, Daniel P.
See Keith L. Lewinger, HY1:Jan 75:17:11053
See A. Koenig, IR76:July 76:321

Lount, A. Murray
Integrated System for Production of Joists, with Sidney H. Simmonds, ST4:Apr 75:807:11242
TR:141:253
Managing a Computer Program Development Project, ST76:Aug 76:921

Low, Dana E.
Use of Simulation in Airport Planning and Design, TE4:Nov 74:985:10954
Dsc: John P. Braaksma, TE3:Aug 75:593:11472
Clo: TE1:Feb 76:182:11881
TR:141:112

Lowder, Harold E.
See Ahmed K. Noor, ST8:Aug 75:1687:11523

Lowrey, Richard D.
See Phillip L. Gould, ST2:Feb 76:429:11927

Loziuk, Lawrence A.
Transient Hydrothermal Analysis of Small Lakes, with James C. Anderson and Ted B. Belytschko, PO2:Nov 73:349:10150
Dsc: Marappatounder Nalluswami, PO2:Dec 74: 215:10976
Clo: PO1:July 75:135:11400
TR:141:178

Lu, James C.S.
See Kenneth Y. Chen, DIEE:Jan 76:435
See Kenneth Y. Chen, WW4:Nov 76:443:12546

Lu, T. D.
See Joseph A. Fischer, OE75:June 75:1

Lu, Tsin-Hwei
Dsc, EM6:Dec 76:1105:12584, of "Finite Element Analysis of Wave Diffraction by a Crack", EM3: June 76:479:12220

Lubin, James B.
Dsc, EI4:Oct 75:524:11597, of "The Adopted ASCE Guide to Turnkey Construction Contracts", EI2: Apr 75:235:11249

Lucero, Larry L.
Issues and Answers in Bikeway System Development, BP75:Dec 75:54

Luco, Juan Enrique
Session 6: Soil Structure Interaction — Seismic Waves, STN75:Dec 75:II-172
See Rany J. Apsel, EM6:Dec 76:957:12627

Ludwick, John C.
Field Performance of Permeable Breakwater, with Peter Fleischer, Ronald E. Johnson and Gerald L. Shideler, WW4:Nov 75:357:11703
Dsc: Jade Dattatri, N. Jothi Shankar and Harihara Raman, WW3:Aug 76:363:12284
TR:141:483

Luk, King S.
Building a Professionally Qualified Faculty, with Eugene H. Kopp, EI2:Apr 74:105:10466
Dsc: Ananthakrishnan Sundar, EI2:Apr 75:299: 11206; Thiruvenkatachari Viraraghavan, EI3: July 75:437:11397
TR:141:15

Lukas, Robert G.
Pressuremeter and Laboratory Test Correlations for Clays, with Bruno LeClerc de Bussy, GT9:Sept 76: 945:12410

Lumb, Alan M.
Runoff Files for Flood Hydrograph Simulation, with L. Douglas James, HY10:Oct 76:1515:12499

Lung, Stanley T.L.
An Algorithm for Route Deviation Service, with Wilfred W. Recker, TE1:Feb 76:161:11931

Lunne, Tom
Correlations Between Vane Shear Strength and Cone Resistance in Some Norwegian Soft Clays, GT75: June 75:II-161
Dsc, GT75:June 75:II-161, of "Measurement of In Situ Strength", GT75:June 75:II-57

Luscher, Ulrich
Geotechnical Aspects of Trans-Alaska Pipeline, with William T. Black and Keshavan Nair, TE4:Nov 75: 669:11722
TR:141:443

Lustig, Morton
Social Evaluation of Land-Use Controls, UP1:Aug 76:111:12356

Lutes, Loren D.
See Nilesh C. Chokshi, EM6:Dec 76:983:12632

Lutin, Jerome
See Walter Cherwony, TE3:Aug 76:525:12299

Lyons, T. Clark
See Klaus Seifert, WR1:Apr 76:23:12071

Lysmer, John
Efficient Finite Element Analysis of Seismic Structure-Soil-Structure Interaction, with H. Bolton Seed, T. Udaka, Richard N. Hwang and C.-F. Tsai, STN75:Dec 75:II-125
Session 6: Soil Structure Interaction — Dynamic Soil Pressure, STN75:Dec 75:II-171
Clo: STN75:Dec 75:II-282
Dsc, SDNPF:Dec 73:III-49, of "Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities", SDNPF:Dec 73:III-19
See E. D'Appolonia, SDNPF:Dec 73:III-19
See H. Bolton Seed, GT5:May 75:439:11318
See H. Bolton Seed, GT4:Apr 76:323:12074
See Zdenek P. Bazant, CE:Oct 76:99

Lytton, Robert L.
See H. S. Chang, NMG:June 76:I-526

Ma, David Chia-Chiun
See Kuang-Han Chu, ST3:Mar 76:569:12008

Macagno, Enzo O.
See Poothrikka P. Paily, HY4:Apr 74:531:10479
See Poothrikka P. Paily, HY3:Mar 76:255:11997

Macaulay, Hugh H.
See John W. Hyden, EE4:Aug 75:623:11524

Macaulay, Steven C.
Dsc, EE5:Oct 75:872:11596, of "Future of Sanitary Landfill", EE1:Feb 75:41:11113

Machemehl, Jerry L.
New Method for Beach Erosion Control, with Thomas J. French and Norden E. Huang, OE75: June 75:142
Sediment Movement in Tubbs Inlet, North Carolina, with Robert P. Masterson, Jr. and Victor V. Cavaroc, Jr., OE75:June 75:313

Machemehl, R. B.
Acquiring Traffic Data by In-Motion Weighing, with Clyde E. Lee and C. Michael Walton, TE4:Nov 75: 681:11716
TR:141:419

Macomber, Robert C.
A Brief History of the Steel Joist Industry, Preprint No.2758, Sept 76, 12pp.

MacPherson, Allan B.
Washington, D.C. Mall Tunnel, with Philip E. Egilsrud, CE:Feb 75:64
Dsc: James R. Hargrove, CE:June 75:26
Clo: CE:June 75:26
TR:141:75

Maddock, Thomas, Jr.
Dsc, HY12:Dec 74:1855:10974, of "Factors Determining Bed Forms of Alluvial Streams", HY3: Mar 74:363:10396

Madhav, Madhira Radha
See Kanakatti Subramanya, HY12:Dec 73:2333: 10197

Madsen, Ole Secher
Energy Dissipation on a Rough Slope, with Stanley M. White, WW1:Feb 76:31:11904
Wave Transmission through Porous Structures, WW3: Aug 74:169:10714
Dsc: Hideo Kondo, WW3:Aug 75:300:11473
Clo: WW1:Feb 76:94:11882
TR:141:126

Madsen, Welby R.
See Haywood C. Dewey, Jr., IR3:Sept 76:335:12434

Maevis, Alfred C.
Dsc, USPS New Architect Selection Forms, CE:Feb 76:28

Magnusson, Sven Erik
Dsc, with Ove Pettersson, EM3:June 75:282:11338, of "Performance Requirements for Fireproofing Materials", EM3:June 74:489:10598

Mahajan, Santosh K.
New Procedure for Numerical Relative Orientation, SU2:Nov 74:155:10962
Dsc: H. J. Dowman, SU1:Oct 75:152:11602; Sanjib K. Ghosh, SU1:Oct 75:153:11602; Donald R. Graff, SU1:Oct 75:155:11602
Clo: SU1:Dec 76:97:12589
TR:141:107

Maham, Norman R.
Automated Analysis of Standard Buildings, ST4:Apr 75:751:11265
TR:141:270

Mahan, Jack L., Jr.
Reporter's Summary of Discussions for Session V — Center City Malls, EFAN:Dec 74:278
Summary for Session III—Health Delivery Systems, EFAN:Dec 74:252
Summary for Session IV —Case Study of Dallas/Fort Worth Airport, EFAN:Dec 74:265

Mahannah, C. N.
See Johannes C. Guitjens, IR76:July 76:117

Maher, Francis J.
See Timothy A. Reinhold, ST5:May 76:1003:12118
See Timothy A. Reinhold, ST9:Sept 76:1643:12372

Maheshwari, J. B.
See Heramb D. Sharma, NMG:June 76:II-662

Maheshwari, Mahendra
See Gerald M. Smith, ST2:Feb 74:391:10355

Mahin, Stephen A.
Nonlinear Seismic Response of a Coupled Wall System, with Vitelmo V. Bertero, ST9:Sept 76:1759: 12407

Mahmood, Khalid
Analysis of Bed Profiles in Sand Bed Canals, with Hassan Ahmadi-Karvigh, WW76:Aug 76:564
Field Research in Large Sand Bed Channels, with Riaz Nazir Tarar, WW76:Aug 76:1318
See Tariq Masood, WW76:Aug 76:591
See Gary L. Eyster, WW76:Aug 76:924
See Ronald E. Nece, WW76:Aug 76:978
See V. Miguel Ponce, WW76:Aug 76:1418

Maier, Giulio
Energy Approach to Inelastic Cable-Structure Analysis, with Roberto Contro, EM5:Oct 75:531: 11614
Errata: EM5:Oct 76:940:12438
TR:141:386
See Leone Corradi, ST9:Sept 74:1925:10832
See Osvaldo De Donato, EM3:June 76:383:12170

Main, Robert B.
See William L. Lane, Preprint No.2684, Apr 76, 26pp.

Maisch, Federico
See Cesar Farell, EM6:Dec 76:1059:12647

Maiti, Subhash Chandra
Plastic Rotations in Continuous Encased Beams, ST6: June 75:1269:11375
TR:141:319

Majumdar, Dalim K.
Effect of Catalyst in Soil-Resin Stabilization, GT6: June 75:531:11385
Dsc: Krishnaiyengar Rajagopalan, GT5:May 76: 573:12091
Clo: GT11:Nov 76:1202:12507
TR:141:333

Mak, Cary K.
See Wun-Chau Cheng, ST4:Apr 75:854:11262

Makdisi, Faiz I.
See H. Bolton Seed, GT7:July 75:651:11449
See Kenneth L. Lee, GT8:Aug 75:801:11527
See H. Bolton Seed, GT9:Sept 75:889:11541

Makitani, E.
See Masanobu Shinozuka, Preprint No.2650, Apr 76, 30pp.

Maksimovic, Cedo
Flood Routing in the System of Free Surface Tunnels, with Miodrag Radojkovic, WW76:Aug 76: 190
See Georgije Hajdin, WW76:Aug 76:993

Male, James W.
See Jon C. Liebman, EE3:June 75:399:11368

Males, Richard M.
See Walter M. Grayman, HY5:May 75:567:11327

Maletic, John T.
See Michael B. Bessler, HY5:May 75:581:11321

Malhotra, V. Mohan
In-Place Evaluation of Concrete, CO2:June 75:345: 11354
TR:141:269

Malisch, Ward R.
Preparation of Surveying Safety Manual for Missouri, with Arthur W. Jacobs, SU1:Oct 75:129:11656
TR:141:292

Malish, David
Dsc, with Michael J. Humenick, EE4:Aug 76:872: 12277, of "Feedlot Wastes to Useful Energy — Fact or Fiction?", EE5:Oct 75:787:11647

Maljian, Perry A.
Tied-Back Deep Excavations in Los Angeles Area, with James L. Van Beveren, CO3:Sept 74:337: 10791
Errata: CO3:Sept 75:668:11533
TR:141:53

Malmquist, Per-Arne
Dsc, HY9:Sept 76:1400:12364, of "ASCE Urban Water Resources Research Program", HY7:July 75: 847:11445

Malt, Harold Lewis
Pedestrianization of the Central City, BP75:Dec 75: 214

Mana, Abdulaziz I.
See G. Wayne Clough, NMG:June 76:I-496

Manam, P. Rao
See Hung Tao Shen, HY1:Jan 76:106:11817

Manfredini, Giovanni
Design Criteria for Anchor Cables and Bolting in Underground Openings, with Sandro Martinetti, Renato Ribacchi and Roberto Riccioni, NMG:June 76:II-859
See Paolo Biondi, NMG:June 76:I-591

Mang, Herbert A.
Finite Element Analysis of Doubly Corrugated Shells, with C. V. Girya Vallabhan and Jimmy H. Smith, ST10:Oct 76:2033:12482

Mangan, George F., Jr.
See Murray B. McPherson, HY7:July 75:847:11445

Mank, John J.
See James L. Hunt, Preprint No.2794, Sept 76, 15pp.

Mann, Ralph H.
Dsc, CE:Apr 75:26, on The Forgotten Engineer: John Stevens and the Panama Canal, CE:Feb 75:54

Mann, Stuart H.
See Glenn R. Harris, TN: EE5:Oct 76:1111:12442

Mansell, Donald S.
Fracture Sensitivity of Dynamically Loaded Girders, with Peter Dobos, ST12:Dec 75:2523:11754
TR:141:492
Dsc, ST9:Sept 75:1992:11537, of "Low-Temperature Tests of Simulated Bridge Members", ST1:Jan 75: 31:11049

Manson, John A.
See Harshavardhan C. Mehta, TE1:Feb 75:1:11103
See Einar Dahl-Jorgensen, TE1:Feb 75:29:11101
See Harshavordhan C. Mehta, TE2:May 76:185: 12102

Mansukhani, Sundru
See Ernest T. Selig, GT8:Aug 75:755:11517

Mantell, Murray I.
Local Land Use Workshops Help, CE:Oct 75:88
TR:141:431

Mar, Brian W.
Challenge of Michaelis-Menton Constants, TN: EE5: Oct 76:1114:12442

Marais, Gerrit v.R.
Dsc, EE5:Oct 75:851:11596, of "Design and Operation Model of Activated Sludge", EE6:Dec 73:773:10220

Marchal, Maurice
Economic Role of the Waterway in Western Europe, WW3:Aug 76:337:12346

Marchetti, S.
Dsc, GT75:June 75:II, of "In Situ Measurement of Initial Stress and Deformation Characteristics", GT75:June 75:II-181

Marcondes Villela, Swami
River Water Quality: Simulation Models or Optimization Techniques, WW76:Aug 76:305

Marcuson, William F., III
Laboratory Standard Penetration Tests on Fine Sands, with Wayne A. Bieganousky, Preprint No.2752, Sept 76, 30pp.
Dsc, STN75:Dec 75:II-271, of "Consideration of Finite Element Representation", STN75:Dec 75:II-246
See Wayne A. Bieganousky, GT3:Mar 76:229:11985
See George R. Skoglund, GT11:Nov 76:1147:12567

Maring, Gary E.
National Highway Travel Forecasts, TE4:Nov 76: 759:12558

Mark, Robert
Stresses in Shallow Elliptical Tunnel, TN: GT11:Nov 76:1187:12513

Marker, Dennis K.
See Warren L. Schroeder, Preprint No.2731, Apr 76, 28pp.

Marker, Vaughn
Dsc, CE:Sept 75:31, on Tough Pollution Laws Spur Use of Impermeable Liners, CE:May 75:63

Markey, Joseph W.
A Study of the Effects of Maintenance Dredging on Selected Ecological Parameters in the Gulfport Ship Channel, Gulfport, Mississippi, with Hugh D. Putnam, DIEE:Jan 76:821

Markland, Eric
See Joseph A. Clark, HY11:Nov 73:1897:10119

Markofsky, Mark
Determining Ambient Water Temperatures, with Roger C. Binkerd, HY3:Mar 75:361:11171
Dsc: Poothrikka P. Paily and John F. Kennedy, HY12:Dec 75:1548:11744
Clo: HY12:Dec 76:1764:12586
TR:141:255
Preoperational and Operational Hydrothermal Field Data Acquisition and Analysis, HY12:Dec 76:1711:12597

Markow, Michael J.
See Fred Moavenzadeh, CO1:Mar 76:51:11967

Marks, David H.
See Louis A. Fuertes, UP2:Nov 74:155:10913
See Donald Grossman, EE6:Dec 74:1219:11022

Marks, G. Warren
Image Error and Photogrammetric Requirements, SU1:Dec 76:39:12607

Markson, R.
See B. Vonnegut, OE75:June 75:1137

Marlette, Ralph R.
See Gary L. Lewis, WW76:Aug 76:1592

Marquis, Eugene L.
Roadside Slope Design for Safety, with Graeme D. Weaver, TE1:Feb 76:61:11922

Marsalek, Jiri
Simulation of Quality of Urban Drainage Effluents, IR76:July 76:564
Dsc, with T. Milne Dick, Paul E. Wisner and William G. Clarke, HY8:Aug 75:1101:11470, of "Independent Comparison of Three Urban Runoff Models", HY7:July 74:995:10685
Dsc, HY12:Dec 76:1773:12586, of "Dimensionless Inlet Hydrograph Model", HY9:Sept 75:1185:11580

Marsch, George
Quarantine Island Disposal Plan, DIEE:Jan 76:579

Marschall, Albert R.
Productivity Improvements Achieved in Navy Public Works Operations, PROD:Aug 76:135

Marsh, Cedric
Fifty Years of Aluminum in Construction, CO3:Sept 75:583:11591
TR:141:428
Dsc, ST1:Jan 76:304:11819, of "Buckling Formulas for Corrugated Metal Shear Diaphragms", ST7:July 75:1403:11429

Marshall, Douglas J.
Why A Co-op Program—A Student's Point of View, EI2:Apr 75:243:11264
TR:141:329

Marshall, John
Shear Stresses in Beams with Discontinuity in Depth, with Ravindra P. Jategaonkar, ST7:July 75:1393:11424
TR:141:338

Marshall, Peter W.
Failure Modes for Offshore Platforms: Part II — Fatigue, ST76:Aug 76:309
Problems in Long-Life Fatigue Assessment for Fixed Offshore Structures, Preprint No.2638, Apr 76, 24pp.

Marshall, Richard D.
See George R. Walker, CE:Dec 75:82

Martin, Charles Samuel
Dsc, with David C. Wiggert, HY7:July 75:1021:11399, of "Simulation Accuracies of Gradually Varied Flow", HY7:July 74:1011:10677

Martin, Charlesworth R.
Modal Control of Multistory Structures, with Tsu T. Soong, EM4:Aug 76:613:12321

Martin, Geoffrey R.
Fundamentals of Liquefaction under Cyclic Loading, with W. D. Liam Finn and H. Bolton Seed, GT5:May 75:423:11284
Dsc: James A. Cheney and Kandiah Arulanandan, GT12:Dec 75:1301:11743
Clo: GT9:Sept 76:1025:12363
TR:141:294
See W. D. Liam Finn, NMG:June 76:I-270
See W. D. Liam Finn, GT8:Aug 76:841:12323
See W. D. Liam Finn, Preprint No.2752, Sept 76, 30pp.

Martin, Ignacio
Dsc, ST7:July 76:1529:12226, of "Minimum Cost Selection of One-Way Slab Thickness", ST12:Dec 75:2585:11785

Martin, Michael J.
See Charles H. Goodspeed, ST8:Aug 74:1677:10763

Martin, Philippe P.
See H. Bolton Seed, GT4:Apr 76:323:12074

Martin, R. Torrence
See Raymond J. Krizek, GT12:Dec 74:1275:11030

Martin, Wallace W.
Fluid-Dynamic Excitation Involving Flow Instability, with Eduard Naudascher and Mahadevan Padmanabhan, HY6:June 75:681:11361
TR:141:343

Martinetti, Sandro
See Paolo Biondi, NMG:June 76:I-591
See Giovanni Manfredini, NMG:June 76:II-859

Marts, Marion E.
Economic Crisis of the 1930's and Water Resources Planning (Abstract), Preprint No.2754, Sept 76, 2pp.

Marvin, Eugene L.
Maintenance Management Aids, Preprint No.2637, Apr 76, 25pp.

Marzouk, Osman A.
Stability of Half-Barrel Orthotropic Shells, with George Abdel-Sayed, ST7:July 75:1517:11441
TR:141:360

Mascenik, John C.
Dsc, CE:Aug 76:33, on Supertanker Fixed Berth in Open Ocean, CE:Apr 76:56

Mashima, Ken I.
See Patrick K. Takahashi, PO1:July 75:111:11455

Mason, Curtis
Regime Equations and Tidal Inlets, WW3:Aug 73:393:9952
Dsc: Morrough P. O'Brien, WW2:May 74:164:10509; Muthusamy Krishnamurthy, WW2:May 74:165:10509; Per Moller Bruun, WW4:Nov 74:403:10903; Adrian G. Chantler, WW4:Nov 74:409:10903; Chintaman V. Gole, Zal S. Tarapore, Shashikant B. Brahme and Ulhas V. Purandare, WW4:Nov 74:411:10903
Clo: WW3:Aug 75:298:11473
TR:141:52
See J. M. Kieslich, OE75:June 75:689

Mason, George E.
OSHA Trenching and Shoring Standards, with Steven Shimp, CO2:June 75:377:11377
TR:141:290

Masood, Tariq
Procedural Errors in Alluvial Channel Measurements, with Khalid Mahmood and M. M. Siddiqui, WW76: Aug 76:591

Masri, Sami F.
Dynamic Environment Simulation by Pulse Techniques, with Frederick B. Safford, EM1:Feb 76:151:11923

Massarsch, K. Rainer
Lateral Earth Pressure at Rest in Soft Clay, with Bengt B. Broms, GT10:Oct 76:1041:12476
Dsc, with Bengt B. Broms and Robert D. Holtz, GT75:June 75:II-260, of "In Situ Measurement of Initial Stress and Deformation Characteristics", GT75:June 75:II-181

Massel, Stanislaw R.
Gravity Waves Propagated over Permeable Bottom, WW2:May 76:111:12107
Interaction of Water Waves with Cylinder Barrier, WW2:May 76:165:12125

Masson, Raymond M.
See Hon-Yim Ko, NMG:June 76:I-294

Masterson, Robert P., Jr.
See Jerry L. Machemehl, OE75:June 75:313

Masur, Ernest F.
Dsc, EM1:Feb 75:82:11086, of "Large-Deflection Spatial Buckling of Thin Walled Beams and Frames", EM6:Dec 73:1259:10247
Dsc, EM3:June 76:585:12162, of "Post-Buckling of Redundant Rectangular Beams", EM4:Aug 75:301: 11491
See David L.C. Lo, EM5:Oct 76:901:12493

Mather, Bryant
Durability of Concrete Construction—50 Years of Progress, CO1:Mar 75:5:11165
TR:141:146

Mathews, Albert A.
Dsc, CE:Sept 75:38, on Protecting Your Firm against Liability Claims, CE:June 75:66

Mathews, Albert E.
Nebraska Flood-Plain Management Program—Part I, HY7:July 75:977:11437
TR:141:361

Matlock, Hudson
Dsc, with Stephen H.C. Foo, GT12:Dec 76:1291: 12585, of "Full-Scale Lateral Load Tests of Pile Groups", GT1:Jan 76:87:11849

Matlock, Robert B.
See Ken P. Chong, ST7:July 75:1381:11433
See Ken P. Chong, ST9:Sept 76:1781:12411

Matson, Jack V.
See Theopolis Holeman, EE5:Oct 75:874:11596

Matsuo, Hiroshi
See Ananthakrishnan Sundar, HY3:Mar 75:554:11148

Matsuoka, Hajime
See Toru Shibata, NMG:June 76:II-599

Mattar, Samir G.
See Colin D. Johnston, ST5:May 76:875:12104

Matteson, DeForest A., Jr.
See Michael O. Hunt, ST4:Apr 76:759:12050

Maull, David J.
See Michael de St. Q. Isaacson, WW1:Feb 76:49: 11934

Mavis, Frederic T.
Dsc, CE:Aug 75:32, on Corps Guidelines for Dam Safety Inspection Need Revamping, CE:Jan 75:74
Dsc, HY9:Sept 75:1300:11535, of "Wall Jet Analogy to Hydraulic Jump", HY3:Mar 75:347:11172
Dsc, HY12:Dec 76:1790:12586, of "Applicability of Unit Stream Power Equation", HY5:May 76:559: 12103

Mavrigian, G.
Porous Breakwater for Circulation Study of Harbors, with Simsek Sarikelle, OE75:June 75:668

May, Gerald W.
See Maharaj K Wanchoo, ST1:Jan 75:201:11059

May, Richard
See Allen Perkins, HY10:Oct 76:1602:12440

Mayer, Paul G.
Hydraulic and Environmental Effects of Commercial In-Stream Dredging, DIEE:Jan 76:947

Mayfield, George M.
Engineering Surveying: Chapters 2, 5, 6, 8, 16, and 20, SU1:Dec 76:59:12648

Maynard, David P.
See William E. Murphy, TE1:Feb 75:115:11107

Mayo, Robert S.
An Introduction to Fifty Years of Tunneling, CO2: June 75:259:11348
TR:141:254

Mayo, Ronald D.
See James L. Congleton, PO1:July 75:35:11416

Mayrbaurl, Ronald M.
See Roman Wolchuk, ST12:Dec 74:2525:10977
See Roman Wolchuk, ST1:Jan 76:203:11857

Mays, Larry W.
Model for Layout and Design of Sewer Systems, with Harry G. Wenzel, Jr. and Jon C. Liebman, WR2: Nov 76:385:12580
See Wilson H. Tang, EE3:June 75:381:11360

Mazar, Ronald J.
See Kyle L. Peyton, ST10:Oct 76:2092:12441

McAnnaly, William H., Jr.
Assessment of Galveston Entrance Movable-Bed Model, with Joseph V. Letter, Jr., Preprint No.2661, Apr 76, 27pp.

McAulay, Alastair D.
Progress in Signaling for Track Guided Systems, TE4:Nov 75:621:11695
TR:141:389

McBean, Edward A.
Numerical Errors in Water Profile Computation, with Frank E. Perkins, HY11:Nov 75:1389:11694
Dsc: Mohammad Akram Gill, HY9:Sept 76:1405: 12364; Chesley J. Posey, HY10:Oct 76:1608: 12440; Subhash C. Jain, HY11:Nov 76:1701: 12508
TR:141:471
See Keith L. Lewinger, HY1:Jan 75:17:11053

McCabe, W. Martin
See Robert M. Koerner, GT7:July 76:761:12239

McCaffery, Robert J.
Solutions of Impact Problems for Structural Dynamic Analyses, STN75:Dec 75:II-47

McCaffrey, George T.
See Raymond J. Smith, ST1:Jan 75:249:11071

McCall, John E.
Dsc, CE:Sept 76:28, on A Short-Cut Plan to Enrich ASCE, CE:Nov 75:95

McCann, David M.
Recording Rapid Settlement by the Oedometer, with Jon Darwell and Bruce Denness, OE75:June 75:401

McCarthy, Michael J.
Ocean Engineering in the Design of Sea Islands, with Edward J. Schmeltz and Joseph Bonasia, OE75: June 75:762

McCartney, Bruce L.
See John P. Ahrens, OE75:June 75:1019
See D. Donald Davidson, HY12:Dec 75:1489:11791

McCauley, James E.
Maintenance Dredging and Four Polychaete Worms, with Danil R. Hancock and Robert A. Parr, DIEE: Jan 76:673

McClellan, Hugh A.
See Lionel H. Eleuterius, DIEE:Jan 76:900

McCollough, Thomas J.
When Is A Political Contribution Influence Buying?, EI1:Jan 76:1:11860
Dsc: Charles E. Harris, EI3:July 76:403:12223; Robert M. Belt, EI4:Oct 76:484:12437

McCollum, Bruce F.
Kansas Solution to Unionism of Professionals, EI3: July 76:283:12253
Dsc: Schaefer J. Dixon, EI3:July 76:291

McConnel, Richard E.
Least-Weight Frameworks for Loads Across Span, EM5:Oct 74:885:10872
Errata: EM4:Aug 75:496:11468
TR:141:113

McConnell, Clifford H.
Operation Scarlift — Mine Drainage Abatement, with Donald E. Fowler and Andrew E. Friedrich, Preprint No.2770, Sept 76, 30pp.

McCormick, Caleb W.
Sparse Matrix Operations in Finite Element Analysis, Preprint No.2765, Sept 76, 20pp.

McCormick, Fred C.
Experimental Bridge Girder of Reinforced Plastic, TE1:Feb 75:47:11104
TR:141:119
Stresses in GRP Cylinders with Radial Line Load, with Richard T. Hunt, EM4:Aug 75:417:11520
TR:141:348

McCorquodale, John A.
See Mohamed Sameh Nasser, WW2:May 75:145: 11286

McCourt, Joseph J.
The Impact of Office Space and Parking Distribution on Commuter Modal Choice, with William C. Miller, Preprint No.2790, Sept 76, 26pp.

McCrory, Jerry A.
Dealing with Variable Flood Hazard, with L. Douglas James and D. Earl Jones, Jr., WR2:Nov 76:193: 12522

McCuen, Alan
See Gene Pound, BP75:Dec 75:326

McCuen, Richard H.
Hydrologic Impact of Planned Unit Developments, with Harry W. Piper, UP1:May 75:93:11329
TR:141:308
See David C. Curtis, UP2:Nov 75:109:11678

McCullough, Benjamin Frank
Criteria Development to Evaluate Runway Roughness, with David Charles Steitle, TE2:May 75:345:11333
TR:141:266

McDaniel, Art
Dsc, Risk Taking, CE:July 76:28

McDonald, Donald
See W. James King, Preprint No.2808, Sept 76, 20pp.

McDonald, J. Douglas
See Don D. Hurlbert, SU1:Dec 76:9:12598

McDonald, James R.
See Kishor C. Mehta, ST9:Sept 76:1709:12429

McDonald, John K.
Dsc, EE5:Oct 75:873:11596, of "Future of Sanitary Landfill", EE1:Feb 75:41:11113

McDonald, Robert E.
Open Steel Box Sections with Top Lateral Bracing, with Yeou-San Chen, Cetin Yilmaz and Ben T. Yen, ST1:Jan 76:35:11850

McDonnell, Archie J.
See Frank H. Pearson, EE1:Feb 75:139:11131
See Frank H. Pearson, EE3:June 75:425:11382
See Frank H. Pearson, CE:Oct 76:102

McDowell, Bruce D.
Intergovernmental Guidance of Land Use and Growth, UP1:Aug 76:15:12319

McEwen, Douglas W.
See Barrington deV. Batchelor, ST9:Sept 76:1789: 12417

McFall, Robert L.
Dsc, HY4:Apr 75:419:11209, of "Mechanism for Streamflow Meandering", HY6:June 74:741:10587
Dsc, IR4:Dec 75:317:11745, of "Management of Waste Fluids in Salaquifers", IR4:Dec 74:413:10991
Dsc, EE4:Aug 76:866:12277, of "Water Supplies for Low-Income Communities in Developing Countries", EE5:Oct 75:687:11608

McFarland, Victor
See Richard Peddicord, DIEE:Jan 76:633

McGarry, Frederick J.
See Antoine E. Naaman, EM2:Apr 74:397:10491

McGauhey, Percy Harold
Memoir of, TR:141:536

McGhee, Terence J.
See Charles Grimwood, WW76:Aug 76:476

McGregor, Gloria S.
County Leads in Steering Growth, CE:July 75:47
TR:141:273

McHenry, J. Roger
Sedimentation Rates in the Upper Mississippi River, with Jerry C. Ritchie and John Verdon, WW76:Aug 76:1339

McIntire, Gregory L.
See William M. Dunstan, WW3:Aug 75:269:11530

McIntosh, David G.
See D. Wayne Kirk, ST1:Jan 75:269:11064

McKee, Jack E.
1976 Edmund Friedman Professional Recognition Award Presented to Jack E. McKee, CE:Oct 76: 102

McKee, Mac
See A. Bruce Bishop, Preprint No.2715, Apr 76, 26pp.

See A. Bruce Bishop, WR2:Nov 76:239:12563

McKenzie, Angus J.
Staging of Improvements to Air Transport Terminals, with Jack W.E. Huggett and Kenneth W. Ogden, TE4:Nov 74:855:10920
Errata: TE4:Nov 75:835:11673
TR:141:94

McKenzie, Vernon
A New Generation of Military Hospitals, with Roy D. Lemons, EFAN:Dec 74:108

McKinney, Ross E.
Dsc, EE3:June 74:789:10564, of "Design and Operation Model of Activated Sludge", EE6:Dec 73:773:10220

McKittrick, David P.
See David S. Gedney, CE:Oct 75:58

McLellon, Waldron M.
See Martin P. Wanielista, EI3:July 75:321:11418

McMahon, Thomas A.
See Russell G. Mein, HY11:Nov 74:1507:10933

McManus, Michael J.
Back to the People: Dallas' Blueprint for the 21st Century, CE:July 76:57
Dsc: Edward J. Groscurth, CE:Nov 76:30

McMaster, Eugene R.
Eugene R. McMaster Takes Office in Philadelphia, CE:Oct 76:93

McMaster, Howard M.
See Ramesh C. Joshi, TE4:Nov 75:791:11730

McMichael, Francis Clay
See Joel A. Tarr, Preprint No.2792, Sept 76, 30pp.

McMinn, Jack H.
Safety Guidelines—Employee Option?, CE:Jan 76:22

McMullen, Arthur E.
See H. Roger Woodhead, ST5:May 74:881:10545
See Ian J. Jordaan, ST11:Nov 74:2255:10951

McMullen, William B.
See James F. McPhail, CE:Feb 76:78

McNaughton, J. G.
Dsc, EE4:Aug 76:864:12277, of "Effect of Media Intermixing on Dual Media Filtration", EE4:Aug 75:503:11528

McNown, John S.
Sinkage and Resistance for Ships in Channels, WW3:Aug 76:287:12291

McPhail, James F.
Yukon River to Prudhoe Bay Highway — Lessons in Arctic Design and Construction, with William B. McMullen and Allan W. Murfitt, CE:Feb 76:78

McPherson, Murray B.
ASCE Urban Water Resources Research Program, with George F. Mangan, Jr., HY7:July 75:847:11445
Dsc: Harold D. Gilman, HY1:Jan 76:11817; Leonard Rice, HY1:Jan 76:11817; Michael B. Sonnen, HY1:Jan 76:11817; Harold C. Coffee, Jr., HY3:Mar 76:442:11950; R. Paul Farrell, Jr., HY3:Mar 76:442:11950; Richard Field, HY3:Mar 76:443:11950; Neil S. Grigg, HY3:Mar 76:444:11950; Charles D.D. Howard, HY3:Mar 76:445:11950; Edwin J. Laszewski, HY3:Mar 76:446:11950; Robert C. McWhinnie, HY3:Mar 76:446:11950; Eugene A. Stallings, HY3:Mar 76:447:11950; Richard H. Sullivan, HY3:Mar 76:448:11950; Harry C. Torno, HY3:Mar 76:448:11950; L. Scott Tucker, HY3:Mar 76:449:11950; Donald H. Waller, HY3:Mar 76:450:11950; Gene E. Willeke, HY3:Mar 76:450:11950; Robert D. Hennigan, HY3:Mar 76:451:11950; Henry L. Michel, HY4:Apr 76:542:12014; James H. Dillingham, HY5:May 76:685:12092; E. D. Eaton, HY5:May 76:686:12092; James E. Goddard, HY5:May 76:687:12092; Stifel W. Jens, HY6:June 76:793:12164; Jacques W. Delleur and Ramachandra A. Rao, HY6:June 76:795:12164; Charles M. Frenz, HY7:July 76:1065:12225; D. Earl Jones, Jr., HY7:July 76:1065:12225; Harvey O. Banks, HY9:Sept 76:1400:12364; Per-Arne Malmquist, HY9:Sept 76:1400:12364
TR:141:370

McQuillan, Joseph A.
Liability of Public and Private Interests on Dams, EFRLD:Sept 75:177

McQuivey, Raul S.
Convective Model of Longitudinal Dispersion, with Thomas N. Keefer, HY10:Oct 76:1409:12478
Dispersion—Mississippi River Below Baton Rouge, La., with Thomas N. Keefer, HY10:Oct 76:1425:12490
Simple Method for Predicting Dispersion in Streams, with Thomas N. Keefer, EE4:Aug 74:997:10708
Dsc: Hugo B. Fischer, EE3:June 75:453:11337
Clo: EE1:Feb 76:215:11876
TR:141:127
See Thomas N. Keefer, HY7:July 74:1031:10668
See Thomas N. Keefer, HY4:Apr 76:538:12014
See Thomas N. Keefer, WW76:Aug 76:201

McSwain, Kenneth R.
See Reuben E. Schmidt, CE:May 76:73

McWhinnie, Robert C.
Dsc, HY3:Mar 76:446:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445

McWhorter, David B.
Transient Drainage with Nonlinearity and Capillarity, with Harold R. Duke, IR2:June 76:193:12185

Meccia, Robert M.
Engineering Challenges of Dredged Material Disposal, with William C. Allanach and Fletcher H. Griffis, WW1:Feb 75:1:11096
Dsc: Per Moller Bruun, WW4:Nov 75:461:11677
Clo: WW3:Aug 76:349:12284
TR:141:196

Mechler, Walter A.
Dsc, HY3:Mar 76:420:11950, of "Removal of Air from Water Lines by Hydraulic Means", HY2:Feb 75:243:11142

Medland, Anthony J.
Dsc, ST6:June 76:1273:12166, of "Integration of Linear Equations of Motion", ST7:July 75:1551:11444

Medlar, Steven J.
Dsc, CE:Jan 76:28, on What's New in Water Treatment?, CE:Sept 75:69

Mee, Allen L.
Wall-Beam Frames under Static Lateral Load, with Ian J. Jordaan and Michael A. Ward, ST2:Feb 75: 377:11121
Dsc: Avigdor V. Rutenberg, ST8:Aug 75:1727: 11471
Clo: ST7:July 76:1509:12226
TR:141:195

Meehan, Richard L.
A Case History of Expansive Claystone Damage, with Michael T. Dukes and Patrick O. Shires, GT9: Sept 75:933:11590
Dsc: Paul M. Reed, GT6:June 76:657:12163; Dinesh Mohan, GT7:July 76:818:12224; Leonard O. Long, GT10:Oct 76:1125:12439
TR:141:465
Dynamic Strength of Hydraulic Fill, TN: GT6:June 76:641:12169
"Geological Hazards," by B.A. Bolt, W.L. Horn, G.A. Macdonald, and R.F. Scott. (Book Review), CE:May 76:39
Dsc, GT4:Apr 76:384:12013, of "Dynamic Analysis of the Slide in the Lower San Fernando Dam during the Earthquake of February 9, 1971", GT9: Sept 75:889:11541

Meek, Jethro W.
Effects of Foundation Tipping on Dynamic Response, ST7:July 75:1297:11411
Dsc: Harold Joseph Sexton, ST6:June 76:1262: 12166
TR:141:326

Meek, John L.
Finite Element Analysis of Cement Fill Exposures, with R. W. Kirkby, NMG:June 76:II-901
Stiffness Matrices for Beam Members Including Warping Torsion Effects, with Peter Swannell, TN: EM1:Feb 76:193:11884
See William Tranberg, ST3:Mar 76:659:11979

Megard, Robert O.
See Heinz Stefan, EE6:Dec 76:1201:12619

Mehrotra, Subhash C.
Circular Jumps, HY8:Aug 74:1133:10758
Dsc: Herman J. Koloseus, HY7:July 75:1029: 11399
TR:141:116
Length of Hydraulic Jump, HY7:July 76:1027:12272
Optimization of Evaporation Pond Cost, EE1:Feb 76: 165:11942
Dsc, HY4:Apr 75:419:11209, of "Flow Characteristics of Sloping Channel Jumps", HY6: June 74:731:10594
Dsc, HY5:May 75:630:11270, of "Surface Runoff Hydrograph Equation", HY10:Oct 74:1353:10880
Dsc, HY12:Dec 75:1548:11744, of "Sediment Inertia as Cause of River Antidunes", HY2:Feb 75:211: 11127
Dsc, HY12:Dec 75:1554:11744, of "Submerged Buoyant Jets in Quiscent Fluids", HY6:June 75: 733:11383
Dsc, HY1:Jan 76:128:11817, of "Solid Particle Settlement in Open-Channel Flow", HY7:July 75: 917:11460
Dsc, HY4:Apr 76:545:12014, of "Turbulent Jets with Reversible Buoyancy", HY9:Sept 75:1221:11586
Dsc, EM5:Oct 76:941:12438, of "Dense Effluent Dispersion in a Stream", EM1:Feb 76:77:11915

Mehta, Ashish J.
Incipient Sediment Motion in Entrances with Shell Beds, with Bent A. Christensen, WW76:Aug 76:960
Dsc, WW4:Nov 74:397:10903, of "Characteristics and Behavior of Pacific Coast Tidal Inlets", WW3: Aug 73:325:9927

Mehta, Harshavardhan C.
Polymer-Impregnated Concrete: Field Studies, with John A. Manson, Wai F. Chen and John W. Vanderhoff, TE1:Feb 75:1:11103
TR:141:118

Mehta, Harshavordhan C.
High-Temperature Drying of Thick Concrete Slabs, with Wai F. Chen, John A. Manson and John W. Vanderhoff, TE2:May 76:185:12102

Mehta, Kishor C.
Windspeeds Analyses of April 3-4, 1974 Tornadoes, with Joseph E. Minor and James R. McDonald, ST9:Sept 76:1709:12429

Mehta, Povindar K.
Durability of Concrete in Seawater, with Harvey H. Haynes, ST8:Aug 75:1679:11516
Dsc: Barry Bromham, ST6:June 76:1275:12166
TR:141:378

Mei, Chiang C.
Quadratic Loss and Scattering of Long Waves, with Philip L-F. Liu and Arthur T. Ippen, WW3:Aug 74: 217:10754
Dsc: Jacobus van de Kreeke, WW4:Nov 75:454: 11677
Clo: WW4:Nov 75:457:11677
TR:141:139
See Umit Unluata, WW2:May 75:161:11287

Meier, Peter M.
Land-Use Model for Service Area Projection, EE1: Feb 76:71:11932
See Jochen Kuhner, EE4:Aug 76:769:12296

Meijer, Karel L.
Pore Pressures Near Moving Underwater Slope, with Adriaan G. van Os, GT4:Apr 76:361:12021

Meiman, James R.
Hydrology of Patch Cuts in Lodgepole Pine, with Thomas L. Dietrich, IR1:Mar 75:41:11197
TR:141:349

Mein, Russell G.
Simple Nonlinear Model for Flood Estimation, with Eric M. Laurenson and Thomas A. McMahon, HY11:Nov 74:1507:10933
Dsc: Walter T. Sittner, HY7:July 75:1034:11399; C. O. Clark, HY8:Aug 75:1110:11470
Clo: HY1:Jan 76:96:11817
TR:141:152
See David P. Heeps, HY7:July 74:995:10685
See Ian D. Moore, TN: HY9:Sept 76:1390:12368

Meissner, Helmut E.
Laterally Loaded Pipe Pile in Cohesionless Soil, NMG:June 76:III-1353

Melchers, Robert E.
Minimum Reinforcement of Nonuniform Plates, EM6:Dec 76:943:12618
Optimally Reinforced Axisymmetric Plates, EM2:Apr 75:143:11258
TR:141:214

Meligi, Ahmed E.
Unreliability of Qualifying Active Mechanical Equipment by Testing Only, STN75:Dec 75:II-11

Melnick, Joseph L.
See Charles P. Gerba, IR3:Sept 75:157:11572

Melosh, Robert J.
Finite Element Technology for Predicting Nonlinear Behavior of Structures, with F. Hatt, Preprint No.2765, Sept 76, 20pp.
Integration of Linear Equations of Motion, ST7:July 75:1551:11444
Dsc: Anthony J. Medland, ST6:June 76:1273: 12166
TR:141:366

Mendenhall, Wesley S., Jr.
The Interstate Era of Highway Construction, Preprint No.2793, Sept 76, 21pp.

Menlove, Roger T.
See Duane D. Buchholz, Preprint No.2644, Apr 76, 19pp.

Mercurio, William F.
See Joseph L. Ehasz, Jr., STN75:Dec 75:II-142

Meredith, Dale D.
Optimal Operation of Multiple Resevoir System, HY2:Feb 75:299:11128
TR:141:217
See Abdullatif S. Hamdan, HY10:Oct 75:1343:11611

Merkle, John G.
Dsc, GT10:Oct 75:1087:11599, of "Effective Stress-Strain-Strength Model for Soils", GT3:Mar 75:259:11157

Merrill, George F.
See George L. Freeland, DIEE:Jan 76:936

Merritt, B. Kent
See Michael W. O'Neill, GT8:Aug 76:857:12318

Merz, Hans A.
See C. Allin Cornell, ST10:Oct 75:2027:11617

Mesri, Gholamreza
Dsc, GT4:Apr 75:409:11208, of "New Design Procedure for Stability of Soft Clays", GT7:July 74:763:10664

Mettam, John D.
Dsc, GT8:Aug 75:836:11469, of "Liquefaction Potential at Ekotisk Tank in North Sea", GT1:Jan 75:1:11054

Meyburg, Arnim H.
Aggregate and Disaggregate Travel Demand Models, with Peter R. Stopher, TE2:May 75:237:11299
TR:141:182
Urban Goods Movement: A Study Design, with Peter R. Stopher, TE4:Nov 76:651:12531

Meyer, Christian
Special Problems Related to Linear Equation Solvers, ST4:Apr 75:867:11223
Dsc: Clifford O. Hays, Jr., ST11:Nov 75:2461:11675
Clo: ST5:May 76:1165:12093
TR:141:236

Meyer, Nathan
Dsc, CO3:Sept 76:571:12362, of "Fifty Years of Construction Law", CO4:Dec 75:703:11758

Meyer, Paul G.
See William C. Little, HY11:Nov 76:1647:12519

Meyer, Richard A.
Survey of Nozzle Piping Reaction Criteria for Mechanical Equipment, STN75:Dec 75:II-283
Dsc, SDNPF:Dec 73:III-104, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81

Meyer, Walter L.
See Joseph C. Dean, CO3:Sept 76:535:12422

Meyerhof, George Geoffrey
Bearing Capacity and Settlement of Pile Foundations, GT3:Mar 76:195:11962

Meyers, Franklin D.
Franklin D. Meyers Takes Office in Philadelphia, CE:Oct 76:93

Michael, Richard P.
Optimization of Denitrification Process, with William J. Jewell, EE4:Aug 75:643:11532
TR:141:416

Michel, Henry L.
Dsc, HY4:Apr 76:542:12014, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445

Mickleborough, Neil C.
Dsc, WW1:Feb 76:109:11882, of "Dynamic Behavior of Box-Girder Jetties", WW2:May 75:181:11310

Middlebrooks, E. Joe
See James H. Reynolds, EE6:Dec 75:1005:11787

Miele, Robert P.
Virus Sampling in Wastewater—Field Experiences, with Michael W. Selna, Preprint No.2724, Apr 76, 30pp.

Mier, Fernando
See Santiago Uriel, GT6:June 75:596:11339

Mifkovic, Charles S.
Environmental Aspects—Sacramento Bank Protection, with Margaret S. Petersen, HY5:May 75:543:11326
TR:141:330

Mih, Walter Chin
Shih-Kang Dam Multi-Purpose Development Project, WW76:Aug 76:1630

Mihalcin, Bernard M.
See Gerald R. Thiers, GT76:Aug 76:283

Milburn, Darrell A.
Research on Titanium Wire Rope for Marine Use, with Michael Chi, Preprint No.2713, Apr 76, 21pp.
Research on Titanium Wire Rope for Marine Use, with Michael Chi, ST11:Nov 76:2137:12535

Miles, Samuel H.
National Program of Inspection of Dams — *NATIONAL DAM INVENTORY*, EFRLD:Sept 75:23

Milhous, Robert T.
Dsc, TE3:Aug 74:787:10698, of "Planning Criteria for Bikeways", TE3:Aug 73:609:9928
Dsc, IR1:Mar 76:167:11951, of "Determining Streamflows from Geomorphic Parameters", IR4:Dec 74:455:10986

Millburn, Reggie
Dsc, On Exposing Errors, CE:Oct 76:30

Miller, Eugene J.
See Harry E. Thomas, CE:Aug 75:66

Miller, Herbert I.
See Robert F. Holbrook, EE6:Dec 76:1263:12614

Miller, J. R., Jr.
See Richard A. Schleusener, IR3:Sept 74:339:10816

Miller, Jerome P., Jr.
Engineering Scheduling with Manpower Allocation, EI2:Apr 75:107:11255
TR:141:308

Miller, John F.
See Robert M. Ragan, HY9:Sept 75:1185:11580

Miller, Phoebe A.
Computer Input/Output Methods Useful for Engineers, with Barry A. Scott, ST76:Aug 76:851

Miller, Robert E.
See Ray N. Nitzsche, TN: EM1:Feb 76:189:11884

Miller, Ronald Ian S.
See W. D. Liam Finn, NMG:June 76:I-194

Miller, Terry L.
Design and Management of Air Monitoring Surveys, with Kenneth E. Noll, EE4:Aug 76:821:12344

Measured Versus Predicted Air Quality Near Highways, with Kenneth E. Noll, EE3:June 76:627: 12195
See Eugene E. Burr, BP75:Dec 75:571

Miller, W. W.
See Johannes C. Guitjens, IR76:July 76:117

Miller, William C.
Complex Source Regulation in Philadelphia, Preprint No.2778, Sept 76, 24pp.
See Joseph J. McCourt, Preprint No.2790, Sept 76, 26pp.

Miller-Richards, G.
See P. A. Cox, WW76:Aug 76:852

Milligan, Victor
Field Measurement of Permeability in Soil and Rock, GT75:June 75:II-3
Dsc: Bernard B. Gordon, GT75:June 75:II-37; Robert I. Kaufman, GT75:June 75:II-39; J. Patrick Powers, GT75:II-46; Bengt-Arne Torstensson, GT75:June 75:II-48

Milner, Henry R.
Dsc, ST9:Sept 75:1986:11537, of "Inelastic Spatial Stability of Restrained Beam-Columns", ST11:Nov 74:2235:10919

Mimikou, Maria
Estimation of Lateral Inflow Hydrographs, with Ramachandra A. Rao, WW76:Aug 76:399

Mingo, Roger D.
See Floyd I. Thiel, TE4:Nov 76:727:12539

Minogue, Robert
Development of United States Atomic Energy Commission Regulatory Standards, SDNPF:Dec 73: III-110
Clo: SDNPF:Dec 73:III-120

Minor, Joseph E.
Window Glass Failures in Windstorms, with W. Lynn Beason, ST1:Jan 76:147:11834
Dsc: C. N. Srinivasan, ST11:Nov 76:2251:12510
See George R. Walker, CE:Dec 75:82
See Kishor C. Mehta, ST9:Sept 76:1709:12429

Mirafuente, Nestor T.
See Edward C.K. Tom, GT76:Aug 76:264

Miranda, Constancio F.
See Yogindra N. Anand, ST76:Aug 76:1060

Mishra, Govinda Chandra
See Kanakatti Subramanya, HY12:Dec 73:2333: 10197

Mistry, Khurshed J.
Stochastic Analysis of Trickling Filter, with David M. Himmelblau, EE3:June 75:333:11362
TR:141:340

Mitchell, James K.
In Situ Measurement of Volume Change Characteristics, with William S. Gardner, GT75: June 75:II-279
Dsc: Ralph E. Brown, GT75:June 75:II-346; Nilmar Janbu, GT75:June 75:II-349; Francois A. Tavenas, GT75:June 75:II-352; John H. Schmertmann, GT75:June 75:II-356
Clo: GT75:June 75:II-357
See Tai-Yeu Wan, GT5:May 76:473:12156
See James H. Hardcastle, IR2:June 76:205:12203

Mix, Howard A.
See Reece H. Wengenroth, CO3:Sept 75:545:11555

Mixer, Jack S.
Dsc, CE:May 76:32, on Protection of Piles: Steel, Concrete, Wood, CE:Dec 75:59

Miyahara, Fukashi
Matrix Analysis of Structure-Foundation Interaction, with John G. Ergatoudis, ST1:Jan 76:251:11836
Dsc: Bernardo Deschapelles, ST12:Dec 76:2382: 12588

Mizota, Taketo
See Yasuharu Nakamura, EM2:Apr 75:125:11226
See Yasuharu Nakamura, EM6:Dec 75:855:11813

Mizumura, Kazumasa
See Chao-Lin Chiu, HY2:Feb 76:185:11905

Moavenzadeh, Fred
Simulation Model for Tunnel Construction Costs, with Michael J. Markow, CO1:Mar 76:51:11967
See Antoine E. Naaman, EM2:Apr 74:397:10491
See Janet Ann Koch Rossow, CO2:June 76:277: 12184

Moffatt, Kevin R.
Dsc, ST6:June 76:1279:12166, of "Strength of Steel Box-Girder Bridges", ST9:Sept 75:1929:11550

Moffett, Frank C.
Dsc, CE:Apr 75:22, on Improving Your Writing, CE: Jan 75:60

Mogharabi, Abdullah
See Adib Kanafani, TE4:Nov 75:657:11715

Mohammed, Abdul I.Y.
Turbulent Flow of Power-Law Fluids, with Narendra N. Gunaji and Phillip R. Smith, HY7:July 75:885: 11459
TR:141:394

Mohan, Aditya
Heat Transfer in Soil-Water-Ice Systems, GT2:Feb 75:97:11123
Dsc: Chih-Tsung Hwang and David W. Murray, GT12:Dec 75:1301:11743
TR:141:200

Mohan, Dinesh
Dsc, GT3:Mar 75:347:11149, of "Review of Expansive Soils", GT6:June 74:667:10609
Dsc, GT7:July 76:818:12224, of "A Case History of Expansive Claystone Damage", GT9:Sept 75:933: 11590

Mohler, Roy J.
See W. Carl Anderson, ST10:Oct 75:2184:11601

Mohr, Adolph W.
Development and Future of Dredging, WW2:May 74: 69:10513
Dsc: Wyndham J. Roberts, WW1:Feb 75:117: 11091
Clo: WW3:Aug 75:298:11473
TR:141:80
Energy and Pollution Concerns in Dredging, WW4: Nov 75:405:11733
TR:141:522
Mechanical Dredges, DIEE:Jan 76:125

Mohraz, Bijan
Liner-Medium Interaction in Tunnels, with Alfred J. Hendron, Jr., Randall E. Ranken and Mohammad H. Salem, CO1:Mar 75:127:11174
TR:141:153

Mohsen, Farrukh N.
See Paul E. Wisner, HY2:Feb 75:243:11142

Mohsin, M. Ezzat
Beam Analog for Plate Elements, with Edward E. Sadek, ST1:Jan 76:125:11844
Errata: ST11:Nov 76:2253:12510

Moin, Syed Afaq
See Vulli L. Gupta, HY10:Oct 74:1353:10880
See Richard L. Cooley, HY6:June 76:759:12213

Moini, S. M. Saleem
Dsc, CO2:June 75:437:11336, of "Engineering Services for Construction", CO3:Sept 74:273:10787
Dsc, CO2:June 75:443:11336, of "Some Construction Aspects of Tarbela Dam", CO3:Sept 74:247:10799
Dsc, CO3:Sept 75:676:11533, of "Excelling as a Construction Contractor", CO4:Dec 74:621:11029

Moline, Robert M.
See Jerome J. Cushing, GT10:Oct 75:1055:11669

Molineaux, Charles B.
Dsc, CO1:Mar 75:229:11147, of "Role of Contract and Specifications in Foundations Construction", CO2:June 74:113:10607

Mollmann, Hugo
Dsc, EM3:June 76:587:12162, of "Statics and Dynamics of Cable Trusses", EM4:Aug 75:429:11506

Mongan, Thomas R.
Measuring Transportation System Performance, with N. J. Nielsen and J. R. Formby, TE3:Aug 75:437:11483
TR:141:291

Monkmeyer, Peter L.
See Bradford W. Spring, OE75:June 75:979

Montgomery, Gail E.
See John T. Novak, EE1:Feb 75:1:11111
See John T. Novak, CE:Oct 76:101

Montgomery, Raymond L.
First Steps Toward Achieving Disposal Area Reuse, with Michael R. Palermo, DIEE:Jan 76:529

Moore, Charles A.
See Hamilton Gray, EE1:Feb 76:229:11876

Moore, Charlie M.
Fifty-Year Development of Upstream Flood-Control Works Construction, CO3:Sept 75:477:11543
Errata: CO3:Sept 76:569:12362
TR:141:352

Moore, Ian D.
Evaluating Rainfall-Runoff Model Performance, with Russell G. Mein, TN: HY9:Sept 76:1390:12368

Moore, Raymond K.
Dsc, GT9:Sept 75:985:11534, of "Behavior of Compacted Soil in Tension", GT9:Sept 74:1051:10828

Moore, Walter L.
See E. Douglas Sethness, Jr., OE75:June 75:677

Moore, William W.
William W. Moore Takes Office in Philadelphia, CE:Oct 76:93

Moos, Bernice S.
See Rudolf H. Moos, EFAN:Dec 74:143

Moos, Rudolf H.
Evaluating the Quality of Constructed Environments, with Bernice S. Moos, EFAN:Dec 74:143

Mooseker, William H.
Dsc, ST1:Jan 76:296:11819, of "Linear Structural Analysis of Multistory Buildings", ST3:Mar 75:551:11163

Morcos, Andrew
See David L.C. Lo, ST7:July 75:1443:11410

Morelli, Ariel E.
Method for Minority Contractor Participation, CO3:Sept 76:449:12373

Morel-Seytoux, Hubert J.
Dsc, with Daniel H. Lau, EE5:Oct 75:859:11596, of "Statistical Evaluation of Reaeration Prediction Equations", EE5:Oct 74:1051:10849
See Purushottam Dass, IR1:Mar 74:1:10397

Morgan, Arthur E.
Eminent Educators Deceased: Arthur E. Morgan, CE:Jan 76:94

Morgan, Bruce
See Alice E. Kidder, TE3:Aug 76:571:12340

Morgan, J. J.
Chemical Models for Metals in Coastal Environments, with T. H. Sibley, OE75:June 75:1332

Morgan, Peter R.
See Lewis C. Schmidt, ST7:July 76:1479:12274

Morgan, T. Ward
See A. Bruce Bishop, Preprint No.2715, Apr 76, 26pp.
See A. Bruce Bishop, WR2:Nov 76:239:12563

Morgan, Thurman T.
The Colonial Port of Charleston, Preprint No.2774, Sept 76, 26pp.

Morgenstern, Norbert R.
See Abbanki V. Gopala Krishnayya, GT9:Sept 74:1051:10828
See John Krahn, GT76:Aug 76:309

Morin, Yvon
See Yvon Ouellet, WW3:Aug 75:231:11494

Morla Catalan, Jose
See Robert C. Garson, ST9:Sept 75:1883:11559

Morlok, Edward K.
See Everett C. Carter, TE3:Aug 75:569:11499

Morris, David
Seasonal Effects on Building Construction, CO1:Mar 76:29:11989
See Michael M. Sprinkel, TN: CO3:Sept 76:561:12371

Morris, Nicholas F.
Analysis of Cable-Stiffened Space Structures, ST3:Mar 76:501:11998
Dsc: Bhagwat P. Jain, ST10:Oct 76:2102:12441
Modal Analysis of Cable Networks, ST1:Jan 75:97:11055
TR:141:162

Morris, Robert K.
Dsc, CE:Oct 76:30, on Concentric Waste-Treatment Plant Saves Land, CE:Feb 76:74

Morris, Samuel C.
Environmental Health Impact Assessment, with E. W. Novak, EE3:June 76:549:12192

Morton, Fred I.
Climatological Estimates of Evapotranspiration, HY3:Mar 76:275:11974

Morton, Roy Jay
Memoir of, TR:141:546

Moseley, Frank N.
See B. J. Copeland, EFEEC:Aug 75:250

Moses, Fred
See George G. Goble, ST4:Apr 75:635:11267

Moses, Robert
Practical Proposal for Restoring Manhattan's West Side Highway, CE:Nov 75:49
TR:141:436

Moshagen, Hermann
Wave Induced Pressures in Permeable Seabeds, with Alf Torum, WW1:Feb 75:49:11099
Dsc: Jean-Herve Prevost, Ove Eide and Knut H. Andersen, WW4:Nov 75:464:11677
Clo: WW4:Nov 76:478:12512
TR:141:234

Moss, Frank H., Jr.
See William R. Giessner, EE4:Aug 74:1013:10744
See William R. Giessner, CE:Oct 76:101

Moss, John Parker
Memoir of, TR:141:547

Mostafa, M. Gamal
See Richard G. Weyermuller, HY10:Oct 76:1439:12458

Moum, A. Richard
Emergency Assistance on Flood Damage in North Dakota Under Section 216 of the Flood Control Act of 1950, IR76:July 76:76

Mowat, Dallas N.
See Colin D. Johnston, ST10:Oct 74:2053:10878

Moyes, Bruce M.
See J. Lawrence Von Thun, GT76:Aug 76:333

Mudroch, Alena
Physicochemical Properties of Dredge Spoil, with Ales J. Zeman, WW2:May 75:201:11317
TR:141:353

Mueller, W. H.
See A. L. Wagner, Preprint No.2695, Apr 76, 25pp.

Mufti, Aftab A.
See Awadh B. Agrawal, ST7:July 76:1527:12226

Muhlhaus, H. B.
Dsc, NMG:June 76:III-1475, of "Nonlinear Analyses in Soil and Solid Mechanics", NMG:June 76:I-205

Muir, Clifford D.
See Jerome A. Westphal, WW76:Aug 76:1383

Muir, John F.
Dsc, HY1:Jan 75:206:11038, of "Transformation of Moody Diagram", HY6:June 74:797:10624

Mulilis, John Paul
See Clarence K. Chan, TN: GT3:Mar 76:277:11953

Mulinazzi, Thomas E.
See Edward L. Priestas, TE2:May 75:211:11306

Mumford, Richard G.
See John E. Hanway, Jr., CE:Oct 76:78

Munch, Anthony V.
See Ernest K. Schrader, CO1:Mar 76:179:11976
See Ernest K. Schrader, CO2:June 76:385:12198

Mungan, Ihsan
Buckling Stress States of Cylindrical Shells, ST11:Nov 74:2289:10965
Errata: ST9:Sept 75:1991:11537
TR:141:117
Buckling Stress States of Hyperboloidal Shells, ST10:Oct 76:2005:12465
Dsc, ST1:Jan 76:302:11819, of "Buckling of Cooling-Tower Shells: State-of-the-Art", ST6:June 75:1185:11364
See Heinrich Stallbohm, ASCE1:Jan 76:303:11819

Munger, G. E., Jr.
See Charles W. Warner, Jr., Preprint No.2682, Apr 76, 16pp.

Munger, Paul R.
See Jerome A. Westphal, WW2:May 76:283:12095
See Jerome A. Westphal, WW76:Aug 76:1383

Munn, Harold C.
Bicycles and Traffic, TE4:Nov 75:753:11729
Dsc: Richard C. Feder, TE3:Aug 76:602:12282; Lane Thompson, TE3:Aug 76:603:12282
TR:141:473

Munse, William E.
Fifty Years of Riveted, Bolted, and Welded Steel Construction, CO3:Sept 76:437:12399

Munse, William H.
See R. Shankaran Nair, ST2:Feb 74:351:10373

Mura Hari, Valupadas
See Nallamuthu Rajaratnam, HY6:June 74:731:10594

Muralidhar, Durfakula
See Nallamuthu Rajaratnam, HY5:May 76:599:12152

Murarka, Ramesh P.
See Kaare Hoeg, GT3:Mar 74:349:10436

Murfitt, Allan W.
See James F. McPhail, CE:Feb 76:78

Murphy, Donald J.
Temporary Excavation in Varved Clay, with G. Wayne Clough and Robert S. Woolworth, GT3:Mar 75:279:11179
TR:141:256

Murphy, Jerry S.
See William L. Smith, BP75:Dec 75:66

Murphy, Michael J.
See Douglas M. Pirie, Preprint No.2647, Apr 76, 17pp.

Murphy, William E.
Surface Texture of British Concrete Pavements, with David P. Maynard, TE1:Feb 75:115:11107
TR:141:121

Murphy, William G.
Conventional Versus Integrated Courses in Structural Analysis and Design, with William J. Hall, ST76:Aug 76:997

Murray, David W.
Technique for Formulating Beam Equations, EM5:Oct 75:561:11613
TR:141:377
See Sundaramoorthy Rajasekaran, ST12:Dec 73:2423:10226
See Chih-Tsung Hwang, GT12:Dec 75:1301:11743

Murtha, Joseph P.
Dynamics of Marine Structures, OE75:June 75:914
See Owen M. Kirkley, OE75:June 75:865

Murthy, V. Radhakrishna
Dsc, ST9:Sept 75:1987:11537, of "Inelastic Spatial Stability of Restrained Beam-Columns", ST11:Nov 74:2235:10919

Mushtaq, Mohammad
Dsc, CO2:June 75:438:11336, of "Engineering Services for Construction", CO3:Sept 74:273:10787

Musialowski, F. R.
See Paul G. Teleki, OE75:June 75:1190

Mustard, J. Neil
Construction of Large Prestressed Concrete Girders, with Ram S. Ghosh, CO4:Dec 74:507:10994
Errata: CO4:Dec 75:940:11740
TR:141:105

Musy, Andre
Bayesian Approach to Tile Drain Design, with Lucien Duckstein, IR3:Sept 76:317:12390
See Martin M. Fogel, IR76:July 76:349

Muzik, Ivan
Laboratory Experiments with Surface Runoff, HY4: Apr 74:501:10463
Dsc: Vijay P. Singh, HY3:Mar 75:555:11148
Clo: HY9:Sept 75:1276:11535
TR:141:52

Myers, Lloyd E.
See Keith R. Cooley, IR3:Sept 73:353:9982

Myers, Robert C.
Boundary Shear in Channel with Flood Plain, with Elsayed M. Elsawy, HY7:July 75:933:11452
Dsc: Nani G. Bhowmik, HY4:Apr 76:542:12014; S. N. Ghosh, HY6:June 76:802:12164
Clo: HY12:Dec 76:1769:12586
TR:141:382

Myers, Vance A.
See James E. Overland, WW4:Nov 76:407:12549

Mynhier, Michael D.
Design Graphs for Activated Sludge Process, with C. P.Leslie Grady, Jr., EE5:Oct 75:829:11659
Dsc: Larry D. Bennefield and Clifford W. Randall, EE4:Aug 76:874:12277; Cheng H. Chiang, EE4:Aug 76:875:12277; Joseph H. Sherrard, EE4:Aug 76:876:12277
Errata: EE2:Apr 76:502:12010
TR:141:484

Naaman, Antoine E.
Minimum Cost Design of Elevated Transit Structures, with Marshall L. Silver, CO1:Mar 76:99: 11986
Minimum Cost Versus Minimum Weight of Prestressed Slabs, ST7:July 76:1493:12268
Probabilistic Analysis of Fiber-Reinforced Concrete, with Fred Moavenzadeh and Frederick J. McGarry, EM2:Apr 74:397:10491
Dsc: James L. Lott, EM2:Apr 75:156:11207; Ramnath N. Swamy and C. V.S. Kameswara Rao, EM2:Apr 75:156:11207
Clo: EM5:Oct 75:709:11598
TR:141:47
Pull-Out Mechanism in Steel Fiber-Reinforced Concrete, with Surendra P. Shah, ST8:Aug 76:1537: 12313
Dsc, ST9:Sept 76:1959:12366, of "Minimum Cost Selection of One-Way Slab Thickness", ST12:Dec 75:2585:11785

Nacci, Vito A.
Engineering Behavior of Calcareous Clays, with Mian-Chang Wang and Kenneth R. Demars, OE75: June 75:380
See Mian-Chang Wang, Preprint No.2664, Apr 76, 19pp.

Naftzger, Robert A.
Wave Forces on a Submerged Hemispherical Shell, with Subrata K. Chakrabarti, OE75:June 75:959
See Subrata K. Chakrabarti, WW3:Aug 74:189:10710

Naik, Tarun R.
Analysis and Design of Laterally Loaded Piles and Caissons in a Layered Soil System, with Alain H. Peyrot, ST76:Aug 76:589
Static and Dynamic Flexibility Matrix for a Semi-Infinite Solid, with Chu-Kia Wang, ST76:Aug 76: 644
See Alain H. Peyrot, ST76:Aug 76:54

Nair, Keshavan
See Ulrich Luscher, TE4:Nov 75:669:11722

Nair, R. Shankaran
High Strength Bolts Subject to Tension and Prying, with Peter C. Birkemoe and William H. Munse, ST2:Feb 74:351:10373
Dsc: Natarajan Krishnamurthy, ST1:Jan 75:335: 11039
Clo: ST7:July 75:1608:11401
TR:141:25
Linear Structural Analysis of Multistory Buildings, ST3:Mar 75:551:11163
Dsc: William H. Mooseker, ST1:Jan 76:296: 11819; Edward L. Wilson and P. J. Hollings, ST1:Jan 76:298:11819
Clo: ST8:Aug 76:1637:12281
TR:141:205
Overall Elastic Stability of Multistory Buildings, ST12:Dec 75:2487:11762
Dsc: Mahjoub M. ElNimeiri, ST10:Oct 76:2092: 12441
TR:141:497

Nair, V. V. Damodaran
See Anestis S. Veletsos, ST1:Jan 75:109:11046

Naito, Masaaki
See Takeichiro Takamatsu, EE4:Aug 74:883:10705

Najarian, Tavit O.
Real Time Model of the Nitrogen Cycle in an Estuary, with Donald R.F. Harleman, Preprint No.2676, Apr 76, 30pp.

Nakamura, Yasuharu
Binary Flutter of Suspension Bridge Deck Sections, with Takeshi Yoshimura, EM4:Aug 76:685:12327
Torsional Flutter of Rectangular Prisms, with Taketo Mizota, EM2:Apr 75:125:11226
TR:141:201
Unsteady Lifts and Wakes of Oscillating Rectangular Prisms, with Taketo Mizota, EM6:Dec 75:855: 11813
TR:141:516

Nakano, Ryoki
See Tadatsugu Tanaka, NMG:June 76:II-650

Nalluri, Chandramouli
See Pavel Novak, HY9:Sept 75:1139:11556

Nalluswami, Marappatounder
Dsc, PO2:Dec 74:215:10976, of "Transient Hydrothermal Analysis of Small Lakes", PO2:Nov 73:349:10150

Nambudripad, Kudallur D.
Dsc, EE4:Aug 75:684:11467, of "Volume of Storm Water Retention Basins", EE5:Oct 74:1165:10889

Name withheld
Dsc, CE:Sept 75:31, on Urban Freeways and Changing Social Values, CE:May 75:80

Narasimham, Sanivarapu V.
Dsc, ST11:Nov 75:2441:11675, of "Steel Box-Girder Bridges—Ultimate Strength Considerations", ST12: Dec 74:2433:11014
Dsc, EM3:June 76:579:12162, of "Model Studies of Multicell Curved Box-Girder Bridges", EM3:June 75:207:11366
See Karl Van Dalen, ST10:Oct 76:1969:12449

Narasimhan, S.
Pressure Fluctuations in Submerged Jump, with V. P. Bhargava, HY3:Mar 76:339:12004
Dsc: Nallamuthu Rajaratnam, HY12:Dec 76:1785: 12586
Dsc, with V. P. Bhargava, HY3:Mar 75:550:11148, of "Flow-Induced Forces on Protruding Walls", HY2: Feb 74:295:10347

Narayanan, Rangaswami
Wall Jet Analogy to Hydraulic Jump, HY3:Mar 75: 347:11172
Dsc: Frederic T. Mavis, HY9:Sept 75:1300:11535
Clo: HY3:Mar 76:425:11950
TR:141:258

Narayanan, Rangesan
See A. Bruce Bishop, Preprint No.2715, Apr 76, 26pp.
See A. Bruce Bishop, WR2:Nov 76:239:12563

Narver, David L., Jr.
The Adopted ASCE Guide to Turnkey Construction Contracts, EI2:Apr 75:235:11249
Dsc: James B. Lubin, EI4:Oct 75:524:11597
TR:141:260

Nash, James M.
See Ray R. Ayers, ST76:Aug 76:439

Nash, John F.
See Emil Simiu, EM2:Apr 76:265:12044

Nash, Kevin L.
Diaphragm Wall Construction Techniques, CO4:Dec 74:605:11025
Dsc: A. L. Little, CO2:June 75:455:11336; S. Clifford Doughty, CO3:Sept 75:671:11533; G. F. Le Sciellour, CO3:Sept 75:674:11533
Clo: CO1:Mar 76:256:11948
TR:141:118
Stability of Trenches Filled with Fluids, CO4:Dec 74:533:11006
Dsc: A. L. Little, CO2:June 75:453:11336; S. Clifford Doughty, CO3:Sept 75:671:11533
Clo: CO1:Mar 76:256:11948
TR:141:113
Dsc, EI3:July 76:402:12223, of "Karl Terzaghi and the Chicago Subway", EI4:Oct 75:477:11668

Nasser, Farouk S.
Roundoff Error Characteristics in Direct Stiffness Solutions, ST76:76:374

Nasser, Mohamed Sameh
Wave Motion in Rockfill, with John A. McCorquodale, WW2:May 75:145:11286
Dsc: Geoffrey J. Edgell, WW1:Feb 76:106:11882
Errata: WW2:May 76:284:12095
TR:141:299

Natarajan, Panchapagesa
Dsc, WW3:Aug 76:358:12284, of "Waves of Maximum Height on Uniform Currents", WW3:Aug 75:259:11509

Nath, John H.
Analysis of Cable Dynamics—State-of-the-Art Summary, OE75:June 75:623
Probability Analysis of Deep Water Breaking Waves, with Fred L. Ramsey, Preprint No.2691, Apr 76, 10pp.
See Tokuo Yamamoto, WW4:Nov 74:345:10944
See Robert W. Thresher, WW4:Nov 75:419:11709
See Tokuo Yamamoto, Preprint No.2633, Apr 76, 19pp.

Naudascher, Eduard
Flow-Induced Forces on Protruding Walls, with Frederick A. Locher, HY2:Feb 74:295:10347
Dsc: S. Narasimhan and V. P. Bhargava, HY3:Mar 75:550:11148; Abhimanyu Swain, Kent T.S. Tzou and Harold D. Palmer, HY7:July 75:1007:11399
Clo: HY8:Aug 75:1096:11470
TR:141:37
See Wallace W. Martin, HY6:June 75:681:11361

Nayak, Gyan C.
Dsc, with Radhey Shyam, ST11:Nov 76:2247:12510, of "Finite Element Analysis of Layered Wood Systems", ST12:Dec 75:2659:11802
See Heramb D. Sharma, NMG:June 76:II-662
See Shamsher Prakash, NMG:June 76:II-886

Nayak, Irvathur Vasudeva
See Jade Dattatri, WW4:Nov 74:399:10903
See T. G. Babu Rao, HY10:Oct 75:1361:11600

Nayar, Kumarapillai K.
Elastoplastic Analysis of Coupled Shear Walls, with Alexander Coull, ST9:Sept 76:1845:12401

Nayfeh, Ali Hasan
Numerical-Perturbation Methods in Numerical Mechanics, NMG:June 76:I-168

Nebiker, John H.
Dsc, EE6:Dec 76:1295:12583, of "Transport Phenomena Applied to Sludge Dewatering", EE6:Dec 75:947:11781

Nece, Ronald E.
Boundary Shear Stress as an Index of Hydraulic Jump Performance, with Khalid Mahmood, WW76:Aug 76:978

Neghabat, F.
See Shih-Chi Liu, EM3:June 76:395:12208

Neill, Charles R.
Scour Holes in a Wandering Gravel River, WW76:Aug 76:1301
Dsc, HY3:Mar 75:538:1148, of "Extreme Roughness of Natural River Channel", HY7:July 73:1027:9831
Dsc, HY3:Mar 75:546:11148, of "River-Ice Problems: A State-of-the-Art Survey and Assessment of Research Needs", HY1:Jan 74:1:10281

Nelson, Harold E.
The Changing Scene, UP1:Aug 76:3:12307
Chicago Urban Transportation Planning, with William L. Barnes, Preprint No.2815, Sept 76, 27pp.

Nelson, Ivan
Soil Island Approach to Structure/Media Interaction, with Jeremy Isenberg, NMG:June 76:I-41

Nelson, Michael D.
See Carmen F. Guarino, EE4:Aug 74:919:10722

Nelson, Richard B.
See James T. Kubo, EM1:Feb 75:45:11133

Nelson, Sherman A.
The University of Idaho Stadium: A Micro-Lam Application, Preprint No.2800, Sept 76, 19pp.

Nelson, Thomas A.
Dsc, CE:May 76:24, on Converting Solar Energy to Hydrogen: Answer to U.S.'s Long-Range Energy Needs?, CE:Jan 76:63

Nemat-Nasser, S.
Hydraulic Fracture and Heat Extraction from Hot Dry Rock Masses: A Finite Element Approach, with Zdenek P. Bazant and H. Ohtsubo, NMG:June 76:I-79

Neogy, Birendra N.
Brink Depth for Trapezoidal Broad-Crested Weir, HY12:Dec 72:2171:9427
Dsc: A. L. Swami and A. K.M. Jilani, HY1:Jan 74:235:10251; Kamil H. M. Ali, HY3:Mar 75:535:11148
Clo: HY12:Dec 75:1539:11744
TR:141:9

Nerses, Hughes M.G.
Fort St. Vrain PCRV Bottom Head Construction, with Clyde B. Tatum, CO2:June 75:391:11394
TR:141:338

Nethercot, David A.
Buckling of Welded Hybrid Steel I-Beams, ST3:Mar 76:461:11965
Design of Diaphragm-Braced I-Beams, with Nicholas S. Trahair, ST10:Oct 75:2045:11615
Dsc: David Allen, ST6:June 76:1282:12166; Narayanan Subramanian, ST6:June 76:1284:12166; Samuel J. Errera, ST8:Aug 76:1639:12281; Tamirisa V.S.R. Apparao, ST9:Sept 76:1952:12366
TR:141:426
Inelastic Lateral Buckling of Determinate Beams, with Nicholas S. Trahair, ST4:Apr 76:701:12020

Nettles, M. Eugene
See Donald B. Stafford, TE1:Feb 76:117:11925

Newbold, J. Denis
Oxygen Depletion Model for Cayuga Lake, with James A. Liggett, EE1:Feb 74:41:10346
Dsc: David A. Bella, EE6:Dec 74:1293:10971
Clo: EE4:Aug 75:667:11467
TR:141:55

Newman, Joseph H.
Dsc, CE:June 75:36, on How Concerned Should Civil Engineers be with Fire Protection?, CE:Mar 75:57

Newman, Leonard
Bus-Carpool FWY Lanes in San Francisco Area, TE4:Nov 76:625:12530
Bus/Carpool FWY Lanes in the San Francisco Area, Preprint No.2646, Apr 76, 26pp.

Newmark, Nathan M.
Seismic Design Spectra for Nuclear Power Plants, with John A. Blume and Kanwar K. Kapur, PO2:Nov 73:287:10142
Dsc: Allen S. Bartu, PO2:Dec 74:213:10976
Errata: PO1:July 75:135:11400
TR:141:152
Dsc, SDNPF:Dec 73:III-51, of "Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities", SDNPF:Dec 73:III-19
Dsc, SDNPF:Dec 73:III-101, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81
See John D. Stevenson, SDNPF:Dec 73:III-81

Newton, Heber T.
See Joel L. Caves, PO2:Nov 76:229:12509

Ng, Samuel
See Gary C. April, DIEE:Jan 76:833

Ng, Simon F.
Study of Three-Flight Free-Standing Staircases, with Alvar T. Chetty, ST7:July 75:1419:11434
Dsc: Himat T. Solanki, ST1:Jan 76:305:11819; Anthony R. Cusens and Khaled O. Ihsanullah, ST5:May 76:1170:12093
Clo: ST11:Nov 76:2237:12510
TR:141:352

Nguyen-Thanh-Long
See Francois Schlosser, CO3:Sept 74:223:10800

Nichols, T. C., Jr.
Rock Strain Recovery — Factor in Foundation Design, with W. Z. Savage, GT76:Aug 76:34

Nickel, Stephen H.
Dsc, GT75:June 75:II-172, of "Measurement of In Situ Strength", GT75:June 75:II-57

Nicolau, Louis E.
See George A. Fox, CO4:Dec 76:637:12622

Nicoletti, Joseph P.
Computer-Aided Structural Analysis and Design of the 37-Story Bonaventure Hotel, with Dilip P. Jhaveri and Leroy Z. Emkin, ST76:Aug 76:796

Nielsen, N. J.
See Thomas R. Mongan, TE3:Aug 75:437:11483

Nielson, Stephen B.
See James H. Reynolds, EE6:Dec 75:1005:11787

Nigam, Prem S.
Stresses in Concrete Around Spiral Case, with Om P. Jain and Madhu B. Kanchi, PO1:Jan 76:95:11845
Errata: PO2:Nov 76:234:12509
Three-Dimensional Analysis of Hydroelectric Power Station, with Om P. Jain and Mahesh B. Kanchi, PO1:Jan 76:35:11830
Errata: PO2:Nov 76:233:12509

Nigli, S. J.
See T. S. Ramanathanlyer, GT:Jan 76:113:11816

Nihan, Nancy L.
Sensitivity of Trip Distribution to Subarea Focusing, with Jacques Lassabliere, TE3:Aug 76:555:12317

Nilforoushan, Reza
Dsc, with Robert D. Hanson, ST8:Aug 76:1641:12281, of "Seismic Behavior of K-Braced Framing Systems", ST10:Oct 75:2147:11636

Nilson, Arthur H.
See Riadh S. Al-Mahaidi, ST11:Nov 75:2359:11732

Nilsson, Ingvar H.E.
Reinforced Concrete Corners and Joints Subjected to Bending Moment, with Anders Losberg, ST6:June 76:1229:12222

Nishino, Fumio
See Chesada Kasemset, EM5:Oct 74:965:10881
See Akio Hasegawa, ST76:Aug 76:937

Nitzsche, Ray N.
Torsion and Flexure of Closed Thin-Walled Beams, with Robert E. Miller, TN: EM1:Feb 76:189:11884

Niwa, Yoshiji
Applications of Integral Equation Method to Some Geomechanical Problems, with Shoichi Kobayashi and Takuo Fukui, NMG:June 76:I-120

Niyogi, Sanat Kumar
Bearing Strength of Reinforced Concrete Blocks, ST5:May 75:1125:11325
Errata: ST3:Mar 76:683:11952
TR:141:301
Concrete Bearing Strength—Support, Mix, Size Effect, ST8:Aug 74:1685:10765
Errata: ST7:July 75:1621:11401
TR:141:83

Noble, Ronald M.
Design Basis Flooding at Offshore Reactor Sites, OE75:June 75:89
Flood Protection of Crystal River Unit 3 Nuclear Plant, with Bert Simpson, PO1:July 75:85:11458
Dsc: Joel L. Caves and Heber T. Newton, PO2:Nov 76:229:12509
TR:141:523

Nolan, Anthony A.
Innovative Design at Florida Bulkhead Reduces Material and Construction Costs, CE:May 76:81

Noland, Jimmy L.
ACI Building Code in Decision Logic Table Format, with Chuan C. Feng, ST4:Apr 75:677:11220
TR:141:226
Logical Complexity in Engineering Specifications, ST76:Aug 76:761

Noll, Kenneth E.
See Terry L. Miller, EE3:June 76:627:12195
See Terry L. Miller, EE4:Aug 76:821:12344

Noonan, Mark E.
See William R. Giessner, EE4:Aug 74:1013:10744
See William R. Giessner, CE:Oct 76:101

Noor, Ahmed K.
Approximate Reanalysis Techniques with Substructuring, with Harold E. Lowder, ST8:Aug 75:1687:11523
Errata: ST6:June 76:1276:12166
TR:141:381
Impact of CDC STAR-100 Computer on Finite Element Systems, with Robert E. Fulton, ST4:Apr 75:731:11216
TR:141:219

Norabhoompipat, Thanet
See Kenneth F. Reinschmidt, ST4:Apr 75:919:11219

Normann, Jerome M
Improved Design of Highway Culvert, CE:Mar 75:70
Errata: CE:June 75:24
TR:141:110

North, James C.
Return of Fines from Commercial Dredging to the Ohio River, with John Clark, DIEE:Jan 76:593

Nospal, Aleksandar
Design of Alternating Diffuser Pipes, with Jean-Claude Tatinclaux, TN: HY4:Apr 76:553:12018

Notess, Charles B.
Summary of Land-Use Policy Papers, UP1:Aug 76: 147:12330

Novak, E. W.
See Samuel C. Morris, EE3:June 76:549:12192

Novak, John T.
Chemical Sludge Dewatering on Sand Beds, with Gail E. Montgomery, EE1:Feb 75:1:11111
TR:141:200
1976 Collingwood Prize Presented to John T. Novak and Gail E. Montgomery, with Gail E. Montgomery, CE:Oct 76:101

Novak, Milos
Dsc, EM4:Aug 76:745:12278, of "Yaw Effects on Galloping Instability", EM6:Dec 75:739:11759

Novak, Pavel
Sediment Transport in Smooth Fixed Bed Channels, with Chandramouli Nalluri, HY9:Sept 75:1139: 11556
Dsc: Gershon Kulin, HY10:Oct 76:1601:12440; Allen Perkins and Richard May, HY10:Oct 76: 1602:12440
TR:141:421

Novak, Stephan R.
See Charles G. Schilling, ST1:Jan 75:31:11049

Novick, David
ASCE's Guidelines for Participation in Public Affairs Activities Four Years Later, EI4:Oct 76:429:12500
Engineering Educator-Practitioner Interchange: Challenge, EI1:Jan 76:21:11865
Dsc: C. Allen Wortley, EI1:Jan 76:26
Requirements of Professional Practice, EI2:Apr 76: 193:12086
See Delon Hampton, EI1:Jan 76:129:11872

Novotny, Frederick
See Martin Lang, CE:Jan 76:54

Novotny, Vladimir
Equalization of Time Variable Waste Loads, with Robert M. Stein, EE3:June 76:613:12191

Nugent, Maynard Charles
Dsc, CE:Jan 76:24, on An Engineer Rebuts a Contractor's Charges of Unfair Contracts, CE:Oct 75:75

Nunn, Douglas
Community Acceptance of Highway Corridor Development, EI3:July 75:337:11414
TR:141:356

Nyman, Douglas J.
Organizational Model for Design Specifications, with Steven J. Fenves, ST4:Apr 75:697:11227
TR:141:241

Obermuller, John C.
See Raymond Eugene Davis, ST3:Mar 74:599:10404

O'Brien, Eugene
Water and Power in the Northeast, with Clarence N. Freeman and John H. Dixon, Preprint No.2688, Apr 76, 22pp.
Water and Power in the Northeast, with Clarence N. Freeman and John H. Dixon, PO2:Nov 76:195: 12574

O'Brien, James J.
VPM Scheduling for High-Rise Buildings, CO4:Dec 75:895:11773
TR:141:510
1976 Construction Management Award Presented to James J. O'Brien, CE:Oct 76:100

O'Brien, John A.
Dsc, PO2:Nov 76:234:12509, of "Vertical Seismic Response Spectra", PO1:Jan 76:121:11858

O'Brien, Leslie
Automatic Surveying — Updating Canada's Control, CE:Feb 76:57

O'Brien, Morrough P.
Morrough P. O'Brien Elected to Honorary Membership, CE:Oct 76:95
Dsc, WW2:May 74:164:10509, of "Regime Equations and Tidal Inlets", WW3:Aug 73:393:9952
Dsc, WW4:Nov 74:398:10903, of "Characteristics and Behavior of Pacific Coast Tidal Inlets", WW3: Aug 73:325:9927

Ockershausen, R. W.
Dsc, EE5:Oct 76:1135:12436, of "Statistical Study of Phosphorus Removal in Wisconsin", EE2:Apr 76: 433:12045

O'Connor, Donald J.
Dsc, with Dominic M. DiToro and Claudia S. Zahorcak, EE2:Apr 75:280:11205, of "Simulation of Water Quality in Tarawera River", EE2:Apr 74: 369:10461

O'Connor, Judith T.
Walking and Biking in the Traffic Mix, BP75:Dec 75: 435

O'Connor, Thomas P.
Investigation of the Elutriate Test, DIEE:Jan 76:299

Oda, Eiichi
On the Distribution of Stress Around a Circular Tunnel Under Internal Pressure in Gravitating Plastic Ground with Frictional Resistance, with Takuo Yamagami, NMG:June 76:II-847

Ogden, Kenneth W.
See Angus J. McKenzie, TE4:Nov 74:855:10920

Oghigian, Niva S.
Planning for Pedestrianways, BP75:Dec 75:103

Ogilvie, James L.
Changing Responsibilities of the Professional Engineer in Public Works, EI3:July 76:345:12275

Oglesby, Clarkson H.
See John D. Borcherding, CO2:May 75:415:11390

Oguntala, Adekunle
Influence of Soil Models on Seismic Response, NMG:June 76:II-1060

Ohara, George T.
See William F. Garber, EE3:June 75:319:11357

O'Hearn, John P.
See Neil S. Grigg, HY4:Apr 76:515:12069

Ohta, Hideki
Anisotropy and Stress Reorientation in Clay Under Load, with C. Peter Wroth, NMG:June 76:I-319

Ohtsubo, H.
See S. Nemat-Nasser, NMG:June 76:I-79

Ojalvo, Morris
Dsc, ST1:Jan 75:343:11039, of "Warping and Distortion at I-Section Joints", ST3:Mar 74:547:10390

Ola, Samuel A.
Need for Estimated Cement Requirements for Stabilizing Lateritic Soils, TE2:May 74:379:10534
Dsc: Gnanadesikam Ramanujam, TE2:May 75:404:11272
Clo: TE1:Feb 76:180:11881
TR:141:51

O'Leary, Dennis A.
See Gerald T. Orlob, Preprint No.2658, Apr 76, 25pp.

Oleinik, James C.
Diaphragms for Curved Box Beam Bridges, with Conrad P. Heins, ST10:Oct 75:2161:11634
TR:141:443

Olitt, Arnold
Developing and Maintaining Client Relationship in the Marketing of Engineering Services, CE:June 76:66

Oliva, James A.
See John Vecchioli, EE2:Apr 75:201:11232

Oliver, David C.
Legal Liability and Highway Design and Maintenance, TE3:Aug 75:425:11481
TR:141:284

Olm, Carl
Dsc, CE:July 76:28, on Energy Conservation in Existing Buildings, CE:Sept 75:79

O'Loughlin, Emmett M.
Dsc, HY4:Apr 75:415:11209, of "Winter-Regime Thermal Response of Heated Streams", HY4:Apr 74:531:10479
Dsc, IR3:Sept 75:232:11536, of "Environmental Aspects of Aquatic Plant Control", IR3:Sept 74:231:10810

Olsen, Bruce C.
Scope of Input to Seismic Design Problem — Past Cooperation and Current Liason, Preprint No.2812, Sept 76, 13pp.

Olsen, Edwin C.
Dsc, IR2:June 75:123:11341, of "Irrigation Management for Salt Control", IR3:Sept 74:321:10822

Olson, Robert A.
Policy-Making and Acceptable Earthquake Risk, EFRLD:Sept 75:141

Olson, Robert E.
Public Participation in the Fuel Cycle: Experiences and Perspectives, EFEEC:Aug 75:381

Olson, Roy E.
Shearing Strength of Kaolinite, Illite, and Montmorillonite, GT11:Nov 74:1215:10947
Dsc: Robin N. Chowdhury, GT8:Aug 75:831:11469
Clo: GT2:Feb 76:180:11878
TR:141:156
See David E. Daniel, GT10:Oct 74:1123:10869

Olufeagba, Benjamin J.
Shooting Models for Salinity and Coliform, with Robert H. Flake, EE1:Feb 76:95:11939

O'Malley, Denis M.
Dsc, CE:July 75:36, on Improving Your Writing, CE:Jan 75:60

O'Malley, John
Dsc, CE:Apr 76:40, on Urban Freeways and Changing Social Values, CE:May 75:80

O'Melia, Charles R.
See Mohammad T. Habibian, EE4:Aug 75:567:11512

O'Neil, Robert S.
Washington Metro: Our National Model, with Edmund A. Fairhead, CE:Sept 76:70

O'Neill, Michael W.
Consolidation of Root-Penetrated Clays: A Case Study, with B. Kent Merritt and Ronald Calsing, GT8:Aug 76:857:12318
Dsc, with Rathindra N. Dutt, GT6:June 76:658:12163, of "Torsional Response of Piles", GT10:Oct 75:1019:11629
See Lymon C. Reese, GT5:May 76:493:12135

Oner, Mete
Nonlinear Analysis of Foundation Vibrations, with Nilmar Janbu, NMG:June 76:II-1025

Onishi, Yasuo
Effects of Meandering in Alluvial Streams, with Subhash C. Jain and John F. Kennedy, HY7:July 76:899:12248

Onu, Gelu
Dsc, ST10:Oct 76:2089:12441, of "Coupled Shear Wall Analysis by Lagrange Multipliers", ST11:Nov 75:2359:11732

Oosterveld, Martin
Hybrid Computer Model of St. Venant Equations, with Kaz Adamowski, HY10:Oct 76:1491:12467

Ordon, Chester J.
Volume of Storm Water Retention Basins, EE5:Oct 74:1165:10889
Dsc: Jong-Song Chien, EE3:June 75:461:11337; Leonard Rice, EE3:June 75:464:11337; William C. Taggart and J. Craig Green, EE3:June 75:465:11337; Kudallur D. Nambudripad, EE4:Aug 75:684:11467; William G. DeGroot and L. Scott Tucker, EE5:Oct 75:863:11596; Donald G. Thompson, EE5:Oct 75:863:11596
Clo: EE:Apr 76:487:12010
TR:141:175

Orlob, Gerald T.
Impact on Marine Benthos of Waste Water Discharge, with Dennis A. O'Leary, Preprint No.2658, Apr 76, 25pp.

O'Rourke, Michael
Optimal Substructuring Schemes, with Thomas Bizal, ST76:Aug 76:1037
Dsc, ST12:Dec 76:2401:12588, of "Response to Stochastic Wind of N-Degree Tall Buildings", ST5:May 76:1059:12112

O'Rourke, Michael J.
Response of Structures to Random Wind Forces, with Richard A. Parmelee and Ross B. Corotis, ST12:Dec 75:2557:11786
TR:141:502

Orsborn, John F.
Determining Streamflows from Geomorphic Parameters, IR4:Dec 74:455:10986
Dsc: Robert T. Milhous, IR1:Mar 76:167:11951
Errata: IR2:June 75:129:11341
TR:141:229

Ortega, Richard A.P.
Dsc, CE:Jan 76:22, on Renovation and Recycling — New Life for Old Buildings, CE:Oct 75:69

Ortolano, Leonard
Integrating Environmental Factors Into Water Planning: An Historical Perspective, Preprint No.2754, Sept 76, 20pp.

Water Plan Ranking and the Public Interest, WR1: Apr 76:35:12068
See Randolph M. Brodersen, UP1:Aug 76:199:12358

Osborn, Herbert B.
See Leonard J. Lane, IR3:Sept 75:237:11536

Osgood, John O.
Ground-Water's Role in Water Quality Management, HY3:Mar 75:517:11159
TR:141:247

Ossenbruggen, Paul J.
Urban Travel Demand Models with Competitive Modes, with Alex Li, TE3:Aug 76:585:12314
See William P. Darby, EE3:June 74:577:10577

Ostapenko, Alexis
Local Buckling of Tubular Steel Columns, with Stephen X. Gunzelman, ST76:Aug 76:549

Oster, Kenneth B.
See Franklin Y. Cheng, ST5:May 76:961:12117

Osterberg, Jorj O.
In Situ Measurement of Soil Properties: Closing Remarks, GT75:June 75:II-357

O'Sullivan, Michael J.
See J. Christopher Rutherford, EE2:Apr 74:369:10461

O'Sullivan, Warren S.
Discs Reduce Manhole Infiltration, CE:Aug 75:77
TR:141:336

Otani, Shunsuke
Simulated Earthquake Tests of R/C Frames, with Mete A. Sozen, ST3:Mar 74:687:10435
Dsc: William H. Townsend, ST1:Jan 75:355:11039
Clo: ST7:July 75:1615:11401
TR:141:45

Otis, Richard J.
Performance of Single Household Treatment Units, with William C. Boyle, EE1:Feb 76:175:11895
Dsc: James D. Westfield and Stephen C. Smith, EE6:Dec 76:1297:12583
See David K. Sauer, EE4:Aug 76:789:12295

Oto, Koji
See Akio Hasegawa, ST76:Aug 76:937

Ottaviani, Mario
See Franco Esu, GT7:July 75:11398

Ouano, Ely Anthony Rosales
Decision Criteria in Solid Waste Collection, with Richard J. Frankel, EE3:June 76:645:12173

Ouellet, Yvon
Effect of Structures on Irregular Waves Compared to Regular Waves, with Yvon Morin, WW3:Aug 75:231:11494
Dsc: Jade Dattatri, N. Jothi Shankar and Harihara Raman, WW3:Aug 76:352:12284; Robert T. Hudspeth and Min-Chu Chen, WW3:Aug 76:353:12284
Clo: WW4:Nov 76:481:12512
TR:141:367

Overland, James E.
Model of Hurricane Tide in Cape Fear Estuary, with Vance A. Myers, WW4:Nov 76:407:12549

Overman, Allen R.
Effluent Irrigation of Pearl Millet, EE2:Apr 75:193:11233
TR:141:281
Effluent Irrigation of Rye and Ryegrass, with Hsiao-Ching Ku, EE2:Apr 76:475:12035

Overstreet, E. Louis
See Norman J. Johnson, EI1:Jan 75:67:11084

Oweis, Issa S.
Dsc, GT6:June 76:654:12163, of "Liquefaction and Cyclic Mobility of Saturated Sands", GT6:June 75:551:11388
See Mishac K. Yegian, GT3:Mar 76:265:11949

Owings, Nathaniel A.
Keynote Adress - Man as the Measure, with Cabell Gwathmey, EFAN:Dec 74:5

Owings, Raymond P.
See Sunder H. Advani, EM3:June 75:257:11386

Oza, Pushpavadan P.
Virus-Coal Sorption Interaction, with Malay Chaudhuri, EE6:Dec 76:1255:12633

Ozawa, Yoshio
Elasto-Plastic Finite Element Analyses of Sand Deformations, with James M. Duncan, NMG:June 76:I-243
Errata: NMG:June 76:III-1477

Ozaydin, I. Kutay
See Zdenek P. Bazant, EM1:Feb 75:57:11138

Ozerkis, David I.
New York City's New Town, CE:Nov 75:68
TR:141:459
See Richard L. Tomasetti, CE:Nov 75:65

Paaswell, Robert E.
Community Role in Modal Choice for Transit System Planning, with Janice Pafka-Gerbig, UP1: May 75:35:11305
TR:141:195

Pabers, Richard F.
See Robert W. Haussler, ST12:Dec 76:2375:12588

Packard, Robert G.
See Gordon K. Ray, TE4:Nov 75:721:11725

Padmanabhan, Mahadevan
See Wallace W. Martin, HY6:June 75:681:11361

Padron, Manuel
See Edward E. Gilcrease, Jr., TE2:May 75:365:11314

Paez, Thomas L.
Probabilistic Analysis of Elastoplastic Structures, with James T.P. Yao, EM1:Feb 76:105:11914

Paez Restropo, Antonio
8-Story Building Moved to Avoid Wrecker's Ball, CE:June 75:62
TR:141:253

Pafka-Gerbig, Janice
See Robert E. Paaswell, UP1:May 75:35:11305

Paik, Young S.
See Thomas F. Zimmie, IR76:July 76:40

Paily, Poothrikka P.
Numerical Prediction of Thermal-Regime of Rivers, with Enzo O. Macagno, HY3:Mar 76:255:11997
Winter-Regime Thermal Response of Heated Streams, with Enzo O. Macagno and John F. Kennedy, HY4:Apr 74:531:10479
Dsc: Edward Silberman, HY12:Dec 74:1859:10974; Emmett M. O'Loughlin, HY4:Apr 75:415:11209
Clo: HY11:Nov 75:1441:11672
TR:141:59
Dsc, with John F. Kennedy, HY12:Dec 75:1548:11744, of "Determining Ambient Water Temperatures", HY3:Mar 75:361:11171

Pajouhi, Keikhosrow
Statistics of Random Wave Field, with Chi C. Tung, WW4:Nov 75:435:11734
Dsc: Ronald G. Tickell, WW4:Nov 76:489:12512
TR:141:525
See Chi C. Tung, Preprint No.2705, Apr 76, 17pp.

Pal, Narinder
Seismic Cracking of Concrete Gravity Dams, ST9: Sept 76:1827:12432

Palaniswamy, Ranga
Fracture and Stress-Strain Relationship of Concrete Under Triaxial Compression, with Surendra P. Shah, ST5:May 74:901:10547
Dsc: Ganpat S. Pandit and Nanik Tanwani, ST3: Mar 75:613:11151
Clo: ST9:Sept 75:1983:11537
TR:141:58

Palermo, Michael R.
See Raymond L. Montgomery, DIEE:Jan 76:529

Pallesen, Lars C.
See Paul M. Berthouex, EE1:Feb 75:127:11132

Palmer, Harold D.
Critical Areas for Research in Oceanographic and Hydrographic Surveying and Charting, SU1:Oct 75: 43:11627
Dsc: Alden P. Colvocoresses, SU1:Dec 76:100: 12589
TR:141:143
See Abhimanyu Swain, OE75:June 75:1436
See Abhimanyu Swain, HY7:July 75:1007:11399

Palmer, Robert Q.
See James R. Walker, OE75:June 75:879

Palmer, Wayne F.
Developments in Trench-Type Tunnel Construction, with Kenneth C. Roberts, CO1:Mar 75:37:11183
TR:141:188

Palumbo, Frank P., Jr.
Constant Water Level Harbor: Memphis, Tennessee, WW76:Aug 76:296

Panagiotopoulos, Panagiotos D.
Analysis of Unilateral Contact Problem, TN: EM5: Oct 76:921:12443

Pandit, Ganpat S.
Optimum Steel Distribution in Corner Slabs, with Subodh C. Sharma, TN: ST12:Dec 76:2360:12593
Dsc, ST3:Mar 75:610:11151, of "Torsional Strength of Prestressed Concrete Beams", ST5:May 74:881: 10545
Dsc, with Nanik Tanwani, ST3:Mar 75:613:11151, of "Fracture and Stress-Strain Relationship of Concrete Under Triaxial Compression", ST5:May 74:901:10547
Dsc, ST7:July 75:1617:11401, of "Torsion-Bending-Shear Interaction for Concrete Beams", ST8:Aug 74:1657:10749

Pani, B. S.
Dsc, with V. V. Jayaraman, HY7:July 75:1016:11399, of "Flow Characteristics of Sloping Channel Jumps", HY6:June 74:731:10594

Paramasivam, P.
See Ananthakrishnan Sundar, CO3:Sept 75:668: 11533

Parameswarappa, M.
See T. G. Babu Rao, HY10:Oct 75:1361:11600

Parekh, Chandrakant J.
Dynamic Relaxation Solution of Seepage Problems, NMG:June 76:II-1133

Parfitt, John, Jr.
Tests of Welded Steel Beam-to-Column Moment Connections, with Wai F. Chen, ST1:Jan 76:189: 11854

Parimi, Sree R.
Limit States Basis for Cold-Formed Steel Design, with Niels C. Lind, ST3:Mar 76:475:12009
See Wilfred W.C. Siu, ST7:July 75:1469:11404

Pariseau, William G.
Thermoelastic/Plastic Analysis in Rock Mechanics, NMG:June 76:II-1168

Park, Robert
Strength of Slab-Column Connections with Shear and Unbalanced Flexure, with Shafiqul Islam, ST9:Sept 76:1879:12419
Dsc, ST1:Jan 75:331:11039, of "Seismic and Cyclonic Response of Continuous Frames", ST2:Feb 74:391: 10355
See Shafiqul Islam, ST3:Mar 76:549:11972

Park, Ted K.
Dynamic Triaxial and Simple Shear Behavior of Sand, with Marshall L. Silver, GT6:June 75:513: 11347
Errata: GT5:May 76:573:12091
TR:141:321
See Marshall L. Silver, GT10:Oct 75:1061:11671

Parker, Denny S.
Lime Recovery and Reuse in Primary Treatment, with Geoffrey A. Carthew and Gerry A. Horstkotte, EE6:Dec 75:985:11789
TR:141:524
See David L. Eisenhauer, EE1:Feb 76:37:11906

Parker, Gary
Detrimental Effects of River Channelization, with David Andres, WW76:Aug 76:1248
Sediment Inertia as Cause of River Antidunes, HY2: Feb 75:211:11127
Dsc: Subhash C. Mehrotra, HY12:Dec 75:1548: 11744; Jorgen Fredsoe, HY1:Jan 76:99:11817
Clo: HY8:Aug 76:1139:12280
TR:141:216

Parker, Henry W.
See Raymond E. Levitt, CO3:Sept 76:465:12384

Parmelee, Richard A.
See Michael J. O'Rourke, ST12:Dec 75:2557:11786

Parr, Robert A.
See James E. McCauley, DIEE:Jan 76:673

Parrott, Leslie J.
Load-Induced Strains in Hardened Cement Paste, with John M. Illston, EM1:Feb 75:13:11118
TR:141:170

Parry, Richard H.G.
Dsc, GT1:Jan 75:78:11037, of "Review of Expansive Soils", GT6:June 74:667:10609
Dsc, with Arif Ajaz, GT6:June 75:599:11339, of "Behavior of Compacted Soil in Tension", GT9: Sept 74:1051:10828
See Srinath F. Amerasinghe, GT12:Dec 75:1277: 11808
See Arif Ajaz, GT9:Sept 76:929:12404

Parsons, Donald A.
See Wendell R. Gwinn, HY1:Jan 76:73:11874

Parsons, H. McIlvaine
Human Factors in the Constructed Environment, EFAN:Dec 74:93

Parsons, James D.
New York's Glacial Formation of Varved Silt and Clay, GT6:June 76:605:12218

Parthum, Charles A.
Two Hundred Years—and More—of Engineering in the United States, EI4:Oct 76:423:12506

Partos, Antal
See Robert M. Koerner, GT3:Mar 74:265:10405

Partridge, Michael J.
Designing More Reliable Waste Treatment Plants, with Charles H. Sutfin, CE:Jan 75:68
TR:141:26

Partridge, Paul W.
Quadratic Finite Elements in Shallow Water Problems, with Carlos A. Brebbia, HY9:Sept 76:1299:12418

Patel, V. C.
See Thomas E. Croley, II, PO1:Jan 76:1:11829
See Thomas E. Croley, II, PO1:Jan 76:21:11828
See Emil Simiu, EM2:Apr 76:265:12044
See Thomas E. Croley, II, PO2:Nov 76:147:12515

Patel, Y. A.
Dsc, SDNPF:Dec 73:III-100, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81

Pathak, Divaker V.
See John E. Goldberg, ST4:Apr 75:821:11235

Patrick, W. H., Jr.
See Robert P. Gambrell, DIEE:Jan 76:418

Patterson, Clair Brandon
Memoir of, TR:141:548

Patterson, Garry J.
See Chang Chen, PO2:Nov 73:429:10111

Paul, Charles K.
Surveying-Mapping Research from Earth Satellites, SU1:Oct 75:27:11628
TR:141:143

Paul, Vincent D.
Diamonds Are The Way To Go, with Robert G.B. Goodell, Preprint No.2681, Apr 76, 12pp.

Paulay, Thomas
Ductile Behavior of Coupled Shear Walls, with Arumbakkam R. Santhakumar, ST1:Jan 76:93:11852
Dsc: K. S. Ponnusamy, ST12:Dec 76:2388:12588

Pauls, David E.
Rock Slopes in an Urban Environment (A Case History), with James G. LaBastie, GT76:Aug 76:182

Paulsen, Charles E.
See Heinz Heckeroth, TE4:Nov 76:605:12524

Paulson, Boyd C., Jr.
Concepts of Project Planning and Control, CO1:Mar 76:67:11984
Dsc: Thomas A. Remus, CO4:Dec 76:693:12582
Designing to Reduce Construction Costs, Preprint No.2643, Apr 76, 10pp.
Designing to Reduce Construction Costs, CO4:Dec 76:587:12600
Education, Research, and Productivity in Construction, PROD:Aug 76:187
Estimation and Control of Construction Labor Costs, CO3:Sept 75:623:11579
TR:141:420
Goals for Education and Research in Construction, CO3:Sept 76:479:12393
See Donald S. Barrie, CO3:Sept 76:425:12394

Paulson, Kurtz L.
Construction of Post-Tensioned PWR Containments, CO1:Mar 76:213:11981

Pavanello, R.
Dsc, EE6:Dec 76:1311:12583, of "Disease Risks of Occupational Exposure to Sewage", EE2:Apr 76:375:12038

Payne, John
Energy Recovery from Refuse—State-of-the- Art, EE2:Apr 76:281:12027

Pearce, William B.
Analysis of Dredging Projects, DIEE:Jan 76:139

Pearson, Carl E.
Computation of Tidal Flow in Well-Mixed Estuaries, with Donald F. Winter, HY3:Mar 76:367:11990

Pearson, Frank H.
Limestone Barriers to Neutralize Acidic Streams, with Archie J. McDonnell, EE3:June 75:425:11382
Errata: EE3:June 76:690:12161
TR:141:1
Use of Crushed Limestone to Neutralize Acid Wastes, with Archie J. McDonnell, EE1:Feb 75:139:11131
Dsc: Chin-Pao Huang, EE1:Feb 76:223:11876
Clo: EE5:Oct 76:1123:12436
TR:141:255
1976 J. James R. Croes Medal Presented to Frank H. Pearson and Archie J. McDonnell, with Archie J. McDonnell, CE:Oct 76:102

Pearson, William R.
The Great River Study — A New Perspective in River Management, with Dennis E. Cin, WW76:Aug 76:536
See Carl C. Cable, DIEE:Jan 76:353

Pease, Thomas E.
Statistical Design Basis for Submerged Diffuser, with Michael J. Skelly, PO1:July 75:11:11408
TR:141:412

Peck, Eugene L.
Effect of Snow Cover on Upward Movement of Soil Moisture, IR4:Dec 74:405:10989
Dsc: Jaroslav Balek, IR3:Sept 75:248:11536
TR:141:257

Peck, Ralph B.
Karl Terzaghi and the Chicago Subway, EI4:Oct 75:477:11668
Dsc: Hugh Q. Golder, EI3:July 76:400:12223; Kevin L. Nash, EI3:July 76:402:12223
TR:141:517
Ralph B. Peck is Washington Award Winner, CE:Feb 76:92

Pecknold, David A.
See David Darwin, ST2:Feb 76:355:11896

Pecquet, Richard A.
See Robert L. Thoms, NMG:June 76:II-623

Peddicord, Richard
Effects of Suspended Dredged Material on the Commercial Crab, *Cancer Magister*, with Victor McFarland, DIEE:Jan 76:633

Peduzzi, Antonio
Tunnel and Shaft Sealing Methods Using Polyvinyl Chloride Sheet, CO1:Mar 76:111:11966

Peers, John B.
San Francisco Bay Area Parking Management Plan, with Oreste M. Bevilacqua, TE4:Nov 76:821:12544

Peirce, J. Jeffrey
See Martin H. David, EE2:Apr 76:433:12045

Pekoz, Teoman B.
See John T. DeWolf, ST10:Oct 74:2017:10875
See Amir Simaan, ST1:Jan 76:77:11851
See V. Kalyanaraman, Preprint No.2807, Sept 76, 38pp.

Pellerin, Roy F.
See M. Dee Strickler, ST3:Mar 76:645:11978

Peltier, Eugene J.
Civil Engineering Management - Prerequisites and Objectives, EI1:Jan 75:5:11060
TR:141:82

Pena, Jose M.
See Subhash C. Jain, HY9:Sept 75:1221:11586

Pena-Pardo, B.
See Nestor Distefano, EM2:Apr 76:313:12047

Pendell, Sue D.
See Wayne D. Veneklasen, EFAN:Dec 74:127

Pender, Michael J.
Dsc, GT11:Nov 76:1202:12507, of "Elastoplastic Stress-Strain Theory for Cohesionless Soil", GT10: Oct 75:1037:11670
Dsc, GT12:Dec 76:1281:12585, of "Some Effects of Dynamic Soil Properties on Soil-Structure Interaction", GT12:Dec 75:1193:11764

Penkava, E.
Subsurface Versus Surface Drainage Water Quality and Environmental Impacts, IR76:July 76:97

Penman, A. D.M.
Earth Pressures Measured with Hydraulic Piezometers, GT75:June 75:II-361

Penumalli, Bhaskara R.
Large-Scale Estuarine Water Quality Matrix Model, with Robert H. Flake and E. Gus Fruh, EE1:Feb 76:191:11946

Peraino, Joseph
Pioneer Offshore LNG Terminal, with William R. Rogers, CE:Apr 76:82

Perdikaris, Philip
See Rafael Jimenez, ST76:Aug 76:457

Peregrine, D. Howell
Surface Shear Waves, HY9:Sept 74:1215:10809
Dsc: Edward H. Wilson, HY7:July 75:1032:11399
Clo: HY3:Mar 76:413:11950
TR:141:130

Perez, Armando I.
See Robert F. Holbrook, EE6:Dec 76:1263:12614

Perez y Perez, Leonardo
See Dean A. Kypke, Preprint No.2698, Apr 76, 30pp.

Perkins, Allen
Dsc, with Richard May, HY10:Oct 76:1602:12440, of "Sediment Transport in Smooth Fixed Bed Channels", HY9:Sept 75:1139:11556

Perkins, David
See Samuel T. Harding, NMG:June 76:II-955

Perkins, Frank E.
See Rafael L. Bras, HY3:Mar 75:451:11196
See Edward A. McBean, HY11:Nov 75:1389:11694

Perkinson, Brian T.
See C. J. Garrison, WW4:Nov 75:343:11699

Perold, Roland P.
Economic Pipe Sizing for Gravity Sprinkler Systems, IR2:June 74:107:10583
Dsc: T. Al Austin, IR2:June 75:115:11341; Ananthakrishnan Sundar, IR2:June 75:117: 11341
Clo: IR4:Dec 75:315:11745
TR:141:123
Economic Pipe Sizing in Pumped Irrigation Systems, IR4:Dec 74:425:10988
Errata: IR4:Dec 75:317:11745
TR:141:245
Dsc, IR3:Sept 76:395:12365, of "Design of Drip Irrigation Main Lines", IR4:Dec 75:265:11803

Perry, S. Dean
See David T.Y. Kao, WW76:Aug 76:1551

Peterka, Jon A.
Adverse Wind Loading Induced by Adjacent Buildings, with Jack E. Cermak, ST3:Mar 76:533: 11980
Wind Pressures on Buildings-Probability Densities, with Jack E. Cermak, ST6:June 75:1255:11373
Dsc: Alan G. Davenport, ST11:Nov 76:2235: 12510
TR:141:314

Petersen, Margaret S.
See Charles S. Mifkovic, HY5:May 75:543:11326

Petersen, Ronald W.
Measuring Quality of Constructions with Man as the Measure, EFAN:Dec 74:70
See Kevin E. Coray, EFAN:Dec 74:249

Peterson, Charles Gary
Pipeline Bridge Uses Timber Arches, CE:Feb 75:58
TR:141:65

Peterson, Dean F.
Dean F. Peterson Elected to Honorary Membership, CE:Oct 76:95

Peterson, Edward W.
The Construction Manager's Impact on Productivity, PROD:Aug 76:99
Tunnel Survey and Tunneling Machine Control, with Peter Frobenius, SU1:Sept 73:21:10008
Dsc: Ralph J. Angarola, Jr., SU2:Nov 74:175: 10900
Clo: SU1:Oct 75:151:11602
TR:141:41

Peterson, Floyd D.
1976 Civil Government Award Presented to Floyd D. Peterson, CE:Oct 76:104

Peterson, George L.
See Pai-kang Wang, TE3:Aug 75:491:11492

Peterson, Stanley D.
Peak-Hour Transit Routing, with Eugene M. Wilson, TE4:Nov 76:847:12547

Peterson, William S.
Dsc, with Celal N. Kostem and John M. Kulicki, ST9:Sept 74:1980:10772, of "Full Range Analysis of Eccentrically Stiffened Plates", ST1:Jan 74:143: 10286

Petrangeli, Mario P.
See Giulio Ceradini, ST10:Oct 75:2015:11618

Petryk, Sylvester
Analysis of Flow through Vegetation, HY7:July 75: 871:11457
TR:141:390

Pettersson, Ove
See Sven Erik Magnusson, EM3:June 75:282:11338

Peurifoy, Robert L.
Fifty Years of Construction Cost-Reducing Analyses, CO2:June 75:299:11371
TR:141:276

Peyrot, Alain H.
Risk of Wind Damage to Transmission Line Systems, with Tarun R. Naik, ST76:Aug 76:54
Dsc, ST11:Nov 75:2459:11675, of "Hybrid Techniques for Inelastic Dynamic Problems", ST4: Apr 75:889:11221
See William E. Saul, ST5:May 76:1059:12112
See Tarun R. Naik, ST76:Aug 76:589

Peyton, Kyle L.
Dsc, with Ronald J. Mazar and Ralph M. Richard, ST10:Oct 76:2092:12441, of "Coupled Shear Wall Analysis by Lagrange Multipliers", ST11:Nov 75: 2359:11732

Pfafflin, James R.
See Raymond K. DeYoung, OE75:June 75:79

Pfefer, Ronald C.
New Safety and Service Guides for Sight Distance, TE4:Nov 76:683:12517

Phair, John P.
See C. Scott Clark, EE2:Apr 76:375:12038

Phelan, Jerry
Responsibility and Liability of Public and Private Interests on Dams, EFRLD:Sept 75:63

Phelps, Harry O.
Shallow Laminar Flows over Rough Granular Surfaces, HY3:Mar 75:367:11166
Errata: HY1:Jan 76:105:11817
TR:141:252

Philips, Jan C.
Session I — Objectives (Introduction), EFEEC:Aug 75:404

Phillips, Donald Charles
Memoir of, TR:141:549

Phillips, James W.
See George A. Costello, EM1:Feb 76:171:11944

Phillips, Judith Ann
Dsc, Water Follies, CE:June 76:34

Phipps, James B.
See John M. Smith, DIEE:Jan 76:512

Picarelli, Luciano
Dsc, GT7:July 76:813:12224, of "Test Loading of Piles and New Proof Testing Procedure", GT9:Sept 75:855:11551

Pichumani, Raman
Finite Element Analysis of Pile-Supported Pavement Structures, with John E. Crawford and George E. Triandafilidis, TE2:May 74:293:10516
Dsc: Harry G. Poulos, Peter T. Brown and Terence J. Wiesner, TE2:May 75:399:11272
Clo: TE1:Feb 76:179:11881
TR:141:44

Pickford, John
Dsc, HY9:Sept 75:1286:11535, of "Oscillations in Surge Tanks", HY10:Oct 74:1369:10891
See Y. R. Reddy, HY11:Nov 74:1685:10969

Pierau, Bernd
See Walter Wittke, NMG:June 76:III-1401

Pierce, Bob
See Glendon T. Stevens, Jr., WW76:Aug 76:725

Pierce, Ira N.
Grantspersonship Roundtable Minutes, BP75:Dec 75: 587

Pierce, Louis F.
Segmental Bridges in Oregon, TE4:Nov 76:673:12548

Piest, Robert F.
Soil Erosion and Sediment Transport from Gullies, with Joe M. Bradford and George M. Wyatt, HY1: Jan 75:65:11069
TR:141:199

Pikul, Mary F.
See Eduardo Aguado, HY7:July 74:869:10639

Pilgrim, David H.
Rainfall Temporal Patterns for Design Floods, with Ian Cordery, HY1:Jan 75:81:11057
Dsc: Willard J. Cotton and Thomas L. Rutherford, HY10:Oct 75:1371:11600; James L. Irish, HY12:Dec 75:1545:11744
Clo: HY6:June 76:783:12164
TR:141:191
See Rex A. Burns, WW76:Aug 76:552

Pilkey, Walter
See George Johnson, TN: ST5:May 76:1135:12128

Pillai, Unnikrishna S.
Dsc, ST5:May 75:1151:11271, of "Design of Reinforced Concrete Spandrel Beams", ST1:Jan 74: 209:10277

Pillsbury, Arthur F.
Dsc, HY12:Dec 75:1551:11744, of "Salinity Control and Federal Water Quality Act", HY5:May 75:581: 11321

Pinckney, Charles
See Louis J. Lee, Preprint No.2708, Apr 76, 14pp.

Piper, Harry W.
See Richard H. McCuen, UP1:May 75:93:11329

Pipes, Anthony
See Michael C. Quick, HY6:June 75:651:11353

Pipes, Wesley O.
Recommendations for Environmental Engineering Education, EE2:Apr 74:243:10459
Dsc: Paul J. Fleming, EE5:Oct 74:1194:10836; Walter G. Gilbert and James O. Bryant, Jr., EE2:Apr 75:273:11205; Thiruvenkatachari Viraraghavan, EE2:Apr 75:274:11205; Gretchen L. Van Meer, EE2:Apr 75:275:11205; Maurice A. Shapiro, EE2:Apr 75:277:11205; Thomas F. Zimmie, EE2:Apr 75:278:11205
Clo: EE6:Dec 75:1028:11741
TR:141:78

Pirie, Douglas M.
Photographic Remote Sensing of Bolinas Lagoon, California, with Michael J. Murphy, Preprint No.2647, Apr 76, 17pp.

Pisano, Mark A.
Nonpoint Sources of Pollution: A Federal Perspective, EE3:June 76:555:12211
208: A Process for Water Quality Management, CE: Nov 76:55

Pisano, William C.
Dsc, with Joseph J. Harrington, EE1:Feb 75:167: 11085, of "Design Optimization for Biological Filter Models", EE6:Dec 73:831:10191

Piwoni, M. D.
See G. Fred Lee, DIEE:Jan 76:253

Plasker, James R.
History of Geodetic Networks, SU1:Dec 76:21:12612
See John D. Bossler, SU1:Oct 75:115:11657

Platzke, Rodney
See Lawrence Carlson, CE:Aug 76:47

Pletta, Dan H.
The Making of a "Pro"—A Faculty Viewpoint, EI3: July 74:217:10645
Dsc: Linton E. Grinter, EI1:Jan 75:76:11036; Robert D. Holtz, EI2:Apr 75:299:11206
Clo: EI1:Jan 76:141:11815
TR:141:28
Social Science Emphasis in Engineering Education, EI4:Oct 75:509:11664
Dsc: Jimmie L. Thomas, EI4:Oct 75
TR:141:496
"The Existential Pleasures of Engineering," by Samuel C. Florman (Book Review), CE:Apr 76:106

Dsc, EI1:Jan 76:52, of "Report on Observations of Attendees at the EF Conference on 'Life Span of Structures'", EI1:Jan 76:47:11870

Pluhowski, Edward J.
Remote Sensing of Turbidity Plumes in Lake Ontario, TE3:Aug 76:475:12306

Podolny, Walter, Jr.
Cable-Stayed Versus Classical Suspension Bridge, TE2:May 76:291:12130
Dsc: James R. Carr, TE4:Nov 76:887:12511
See Richard H. Gade, ST7:July 76:1299:12233

Podolske, Richard C.
See C. Todd Heglund, BP75:Dec 75:482

Poister, Theodore H.
See Srikanth Rao, Preprint No.2768, Sept 76, 24pp.

Polensek, Anton
Finite Element Analysis of Wood-Stud Walls, ST7: July 76:1317:12234

Polin, Lewis
See Walter Cherwony, TE2:May 75:199:11282

Pollner, Eugenio
Dsc, with Meshulam Groper, ST1:Jan 75:330:11039, of "Dynamic Properties of Tall Shear-Wall Buildings", ST2:Feb 74:305:10336

Polus, Abishai
Analytical Study of Freeway Reliability, with Joseph L. Shofer, TE4:Nov 76:857:12570
Dsc, TE3:Aug 76:601:12282, of "Visual Quality Controls in Highway Design", TE3:Aug 75:479: 11487

Pompa, Leonard
See Alex S. Redner, EM4:Aug 76:659:12347

Ponce, V. Miguel
Meandering Thalwegs in Straight Alluvial Channels, with Khalid Mahmood, WW76:Aug 76:1418

Ponnusamy, K. S.
Dsc, ST12:Dec 76:2388:12588, of "Ductile Behavior of Coupled Shear Walls", ST1:Jan 76:93:11852
See Arumbakkam R. Santhakumar, ST3:Mar 76:680: 11952

Pope, R. M.
Dredged Material Disposal: Social Costs and Other Externalities, DIEE:Jan 76:398

Popescu, Calin
Developments in CPM, PERT, and Network Analysis, with John D. Borcherding, CO4:Dec 75: 769:11763
TR:141:468

Popov, Egor P.
See Helmut Krawinkler, ST11:Nov 75:2317:11717

Popov, Egor Paul
1976 Ernest E. Howard Award Presented to Egor Paul Popov, CE:Oct 76:97

Popovics, Sandor
Dsc, CO4:Dec 74:654:10970, of "Basic Construction Principles in Higher Latitudes", CO1:Mar 74:33: 10399

Popper, Robert J.
See Jason C. Yu, TE1:Feb 76:91:11938

Porter, Dennis
See Jerry B. Schneider, TE4:Nov 74:943:10936

Porter, Frank L.
See Harry W. Johnson, Preprint No.2700, Apr 76, 23pp.

Porter, James C.
Load Factor Analysis of Design of Bridges, ST5:May 76:891:12098
Dsc, CE:Mar 76:30, on Short Span Bridges, CE:July 75:42
Dsc, CE:Mar 76:30, on News in Bridge Decks, CE: Aug 75:60

Porter, Max L.
Design Recommendations for Steel Deck Floor Slabs, with Carl E. Ekberg, Jr., ST11:Nov 76:2121:12528
Shear-Bond Analysis of Steel-Deck-Reinforced Slabs, with Carl E. Ekberg, Jr., Lowell F. Greimann and Hotten A. Elleby, ST12:Dec 76:2255:12611
Dsc, with Carl E. Ekberg, Jr., ST3:Mar 75:615: 11151, of "Composite Steel-Concrete Construction", ST5:May 74:1085:10561

Porter, Ronald L.
See Mriganka M. Ghosh, EE1:Feb 75:71:11120

Posey, Chesley J.
Inverted Filter Stabilizes Soil, Stops Erosion, CE:Apr 76:78
Dsc: Mohammad Akram Gill, CE:Oct 76:30
Tests of Scour Protection for Bridge Piers, HY12:Dec 74:1773:11017
Dsc: Shrikrishna V. Chitale and Vijaykumar K. Kulkarni, HY10:Oct 75:1369:11600; L. Veiga da Cunha, HY11:Nov 75:1454:11672
Clo: HY4:Apr 76:531:12014
TR:141:174
Dsc, WW2:May 75:220:11274, of "Speed of Ships in Restricted Navigation Channels", WW2:May 74: 133:10539
Dsc, HY10:Oct 76:1608:12440, of "Numerical Errors in Water Profile Computation", HY11:Nov 75: 1389:11694
Dsc, HY12:Dec 76:1791:12586, of "Safety Factors for Riprap Protection", HY5:May 76:637:12115

Poskitt, Trevor J.
Dynamic Behavior of Box-Girder Jetties, WW2:May 75:181:11310
Dsc: Neil C. Mickleborough, WW1:Feb 76:109: 11882
Clo: WW3:Aug 76:351:12284
TR:141:341

Poulos, Harry G.
Lateral Load-Deflection Prediction for Pile Groups, GT1:Jan 75:19:11061
TR:141:181
Method of Calculating Long-Term Creep Settlements, with Laurence P. de Ambrosis and Edward H. Davis, GT7:July 76:787:12273
Prediction of Downdrag Forces in End-Bearing Piles, with Edward H. Davis, GT2:Feb 75:189:11144
TR:141:232
Torsional Response of Piles, GT10:Oct 75:1019: 11629
Dsc: Michael W. O'Neill and Rathindra N. Dutt, GT6:June 76:658:12163; Ulrich W. Stoll, GT6: June 76:660:12163
Clo: GT12:Dec 76:1278:12585
TR:141:472
Dsc, with Peter T. Brown and Terence J. Wiesner, TE2:May 75:399:11272, of "Finite Element Analysis of Pile-Supported Pavement Structures", TE2:May 74:293:10516
See John R. Booker, GT1:Jan 76:1:11826
See John R. Booker, NMG:June 76:I-425

Poulos, Steve J.
See Gonzalo Castro Salas, Preprint No.2752, Sept 76, 34pp.

Pound, Gene
San Diego-Coronado Bay Bridge: Bicycle Shuttle Service, with Alan McCuen, BP75:Dec 75:326

Powell, Graham H.
Subassemblage Concept for Tall Frame Analysis, with M. Bassam El Hafez, ST8:Aug 74:1611:10739

Dsc: Francois Cheong Siat Moy and K. Takanashi, ST6:June 75:1291:11342
Clo: ST12:Dec 75:2678:11746
TR:141:72
See M. Bassam El Hafez, ST9:Sept 74:1837:10796

Powers, J. Patrick
Dsc, GT75:II-46, of "Field Measurement of Permeability in Soil and Rock", GT75:June 75:II-3

Prabhakara Rao, A. V.S.
See C. Venkobachar, EE2:Apr 75:268:11205

Prakasam, Tata B.S.
See Embar G. Srinath, EE2:Apr 76:449:12041

Prakash, Anand
Radial Dispersion Through Adsorbing Media, HY3: Mar 76:379:11995
Dsc, IR1:Mar 75:71:11150, of "Subsurface Drainage Solutions by Galerkin's Method", IR1:Mar 74:1: 10397
Dsc, HY1:Jan 76:109:11817, of "Sparsity Oriented Analysis of Large Pipe Networks", HY4:Apr 75: 341:11260
Dsc, HY3:Mar 76:430:11950, of "Rapid Temperature Reduction of Thermal Discharge", HY5:May 75: 529:11312
Dsc, HY7:July 76:1067:12225, of "Ground-Water Recharge Simulation", HY9:Sept 75:1235:11588
Dsc, HY10:Oct 76:1609:12440, of "Local Erosion Caused by Rapid Forced Infiltration", HY12:Dec 75:1477:11796
Dsc, with V. S. Shastri Annambhotla, HY12:Dec 76: 1780:12586, of "Perforated-Pipe Water Intake for Fish Protection", HY2:Feb 76:139:11900

Prakash, Shamsher
Analysis of Buried Pipe Under Embankment, with Gyan C. Nayak and R. Gupta, NMG:June 76:II-886
See Gopal Ranjan, GT9:Sept 75:983:11534

Prandle, David
Numerical Model of St. Lawrence River Estuary, with Norman L. Crookshank, HY4:Apr 74:517: 10472
Dsc: Ben Chie Yen, HY1:Jan 75:202:10038; John M. Townson, HY7:July 75:1014:11399
Clo: HY12:Dec 76:1763:12586
TR:141:55

Prasad, S. N.
Integral-Equation Analysis of Flows Over Eroding Beds, with Carlos V. Alonso, WW76:Aug 76:760

Prasthofer, Peter H.
See Paul H. Wirsching, ST7:July 76:1447:12264

Prathap, Gangan
Finite Deflection of Tapered Cantilevers, with Tirupathi Kumara Varadan, TN: EM3:June 76:549: 12168
Dsc: Robert Schmidt, TN: EM6:Dec 76:1104: 12584

Prato, Carlos A.
Simplified Analysis of Wall-Frame Building Structures, TN: ST12:Dec 76:2353:12593
Dsc, EM6:Dec 76:1100:12584, of "Buckling of Axially Loaded Open Shells", EM2:Apr 76:199: 12055

Pratsch, Lew
Carpools: How Successful?, CE:Feb 75:61
TR:141:69

Precoda, Norman
Russia Redistributes River Flow, CE:Feb 75:72
Dsc: Thaddeus M. Prus-Chacinski, CE:July 75:30
Clo: CE:Nov 75:30
TR:141:85

Preiser, Wolfgang F.E.
See Clayford T. Grimm, ST8:Aug 76:1531:12322

Prevost, Jean-Herve
Analysis of Pressuremeter in Strain-Softening Soil, with Kaare Hoeg, GT8:Aug 75:717:11488
TR:141:377
Effective Stress-Strain-Strength Model for Soils, with Kaare Hoeg, GT3:Mar 75:259:11157
Dsc: John G. Merkle, GT10:Oct 75:1087:11599
Clo: GT6:June 76:12163
TR:141:239
Undrained Stress-Strain-Time Behavior of Clays, GT12:Dec 76:1245:12644
Dsc, with Ove Eide and Knut H. Andersen, WW4: Nov 75:464:11677, of "Wave Induced Pressures in Permeable Seabeds", WW1:Feb 75:49:11099

Price, Paul
See George S. Tseng, ST76:Aug 76:977

Price, Robert I.
Luncheon Remarks at Ocean Engineering III, OE75: June 75:1485

Price, Roland K.
Comparison of Four Numerical Methods for Flood Routing, HY7:July 74:879:10659
Dsc: Danny L. Fread, HY3:Mar 75:565:11148; Jean A. Cunge and James A. Liggett, HY4:Apr 75:431:11209; Himat T. Solanki and Joseph A. Valenti, HY4:Apr 75:434:11209; Arie Ben-Zvi, HY6:June 75:783:11340; Michael Amein, HY8: Aug 75:1098:11470
Clo: HY1:Jan 76:92:11817
TR:141:96

Price, Walter H.
Dsc, CE:Sept 75:30, on 9000 psi Concrete — Why? Why not?, CE:May 75:52

Priest, Melville S.
Depth of Marine Pipeline Burial Near Shore, with Keith H. Denson, Preprint No.2636, Apr 76, 6pp.

Priestas, Edward L.
Traffic Volume Counting Recorders, with Thomas E. Mulinazzi, TE2:May 75:211:11306
TR:141:206

Priestley, M. J.N.
Dsc, with S. Thurston, ST6:June 76:1277:12166, of "Thermal Calculations for Bridge Design", ST9: Sept 75:1763:11545

Prins, Adry
See Gerrit J. Klaasen, HY4:Apr 76:535:12014

Prins, D. A.
See Paul G. Teleki, OE75:June 75:1190

Prins, Jan R.
Laboratory Study of Energy Losses at Storm Sewer Junctions, with David R. Townsend, IR76:July 76: 609

Pritchard, Donald W.
See H. H. Carter, OE75:June 75:1420

Pritchard, Robert S.
A Difference Scheme for the AIDJEX Sea Ice Model, with Roger Colony, NMG:June 76:II-1194
See Max D. Coon, NMG:June 76:II-1210

Proctor, Richard J.
See Matt S. Walton, TE4:Nov 76:715:12532

Pruitt, William O.
See J. Ian Stewart, IR2:June 74:179:10626

Prus-Chacinski, Thaddeus M.
Dsc, CE:July 75:30, on Russia Redistributes River Flow, CE:Feb 75:72

Pulmano, Victor A.
Tapered Plane Stress Annular Sector Finite Element, EM4:Aug 75:349:11498
TR:141:288
Variation of Tapered Plates by Finite Strip Method, with Radhey K. Gupta, TN: EM3:June 76:553:12168
See Sid French, ST9:Sept 75:1801:11553

Purandare, Ulhas V.
See Chintaman V. Gole, WW4:Nov 74:411:10903

Purdom, P. Walton
Is Undergraduate Environmental Engineering Education Desirable?, EE2:Apr 76:329:12039

Putnam, Hugh D.
See Joseph W. Markey, DIEE:Jan 76:821

Pyke, Robert
See John R. Banister, GT10:Oct 76:1073:12471

Pyke, Robert M.
Settlement of Sands under Multidirectional Shaking, with H. Bolton Seed and Clarence K. Chan, GT4:Apr 75:379:11251
TR:141:287

Quazi, M.
Dsc, HY12:Dec 76:1782:12586, of "Perforated-Pipe Water Intake for Fish Protection", HY2:Feb 76:139:11900

Quick, Michael C.
Mechanism for Streamflow Meandering, HY6:June 74:741:10587
Dsc: Robert L. McFall, HY4:Apr 75:419:11209
Clo: HY10:Oct 75:1360:11600
TR:141:74
Nonlinear Channel Routing by Computer, with Anthony Pipes, HY6:June 75:651:11353
Dsc: Peter Richard Wormleaton, HY3:Mar 76:438:11950; Thomas N. Keefer, James O. Sherman and Raul S. McQuivey, HY4:Apr 76:538:12014
Clo: HY11:Nov 76:1699:12508
TR:141:339

Quinn, Alfred O.
The Brock and Weymouth Photogrammetric Mapping Equipment, Preprint No.2789, Sept 76, 10pp.

Quinn, Frank H.
Pressure Effects on Great Lakes Vertical Control, SU1:Dec 76:31:12605

Raats, Petrus A.C.
Dsc, with Jan van Schilfgaarde, IR4:Dec 74:519:10975, of "Subsurface Drainage Solutions by Galerkin's Method", IR1:Mar 74:1:10397

Rabcewicz, Ladislaus v.
Tunnel under Alps Uses New, Cost-Saving Lining Method, CE:Oct 75:66
TR:141:408

Rabe, Frank T.
Highway and Sewer Impacts on Urban Development, with James F. Hudson, UP2:Nov 75:217:11728
TR:141:527

Rabizadeh, Rahmat Ollah
Dynamic Analysis of Curved Box-Girder Bridges, with Sidney Shore, ST9:Sept 75:1899:11561
TR:141:414

Rad, Parviz F.
Importance of Groove Spacing in Tunnel Boring Machine Operations, GT9:Sept 75:949:11589
Dsc: Peter J. Tarkoy, GT10:Oct 76:1122:12439
TR:141:460

Radojkovic, Miodrag
Mathematical Modelling of Rivers with Flood Plains, WW76:Aug 76:56
See Cedo Maksimovic, WW76:Aug 76:190

Radziul, Joseph V.
See Carmen F. Guarino, EE5:Oct 76:953:12473

Rafay, Tariq
See M. Z. Cohn, EM4:Aug 74:773:10757

Ragade, Rammohan K.
Nonquantitative Methods in Water Resources Management, with Keith W. Hipel and Tharakkal E. Unny, WR2:Nov 76:297:12565

Ragan, Robert M.
Dimensionless Inlet Hydrograph Model, with Morris J. Root and John F. Miller, HY9:Sept 75:1185:11580
Dsc: Dag-Cheng Woo, HY4:Apr 76:544:12014; Jiri Marsalek, HY12:Dec 76:1773:12586
TR:141:434
Use of Satellite Data in Urban Hydrologic Models, with Thomas J. Jackson, HY12:Dec 75:1469:11790
TR:141:475
See Thomas J. Jackson, HY12:Dec 74:1739:11010

Raggett, Jon D.
Estimating Damping of Real Structures, ST9:Sept 75:1823:11554
Dsc: Ricardo Dobry and Robert V. Whitman, ST5:May 76:1173
Clo: ST12:Dec 76:2378:12588
TR:141:405

Raghu, Dorairaja
See Braja M. Das, TN: GT9:Sept 76:1009:12367

Ragone, Stephen E.
See John Vecchioli, EE2:Apr 75:201:11232

Rahn, Perry M.
See L. Srinivasa-Iyer, CO3:Sept 75:593:11574

Rains, William A.
New Era in Fire Protective Coatings for Steel, CE:Sept 76:80

Raj, P. Packia
Optimum Structural Design by Dynamic Programming, with S. Olani Durrant, ST8:Aug 76:1575:12329

Rajagopalan, Kadambi S.
See Shrikrishna V. Chitale, HY10:Oct 74:1487:10839

Rajagopalan, Krishnaiyengar
Dsc, ST8:Aug 75:1721:11471, of "Ferrocement—Material Behavior in Flexure", ST10:Oct 74:2053:10878
Dsc, EM6:Dec 75:912:11742, of "Dual Failure Criterion for Plain Concrete", EM6:Dec 74:1167:10996
Dsc, GT5:May 76:573:12091, of "Effect of Catalyst in Soil-Resin Stabilization", GT6:June 75:531:11385
Dsc, ST6:June 76:1269:12166, of "Effects of Elevated Temperature on Structural Members", ST7:July 75:1531:11440
Dsc, ST7:July 76:1520:12226, of "Physical Properties of Premixed Polymer Concrete", ST11:Nov 75:2293:11704
Dsc, EM5:Oct 76:937:12438, of "Accuracy of Some Numerical Methods for Column Buckling", EM5:Oct 75:549:11607
Dsc, EM6:Dec 76:1095:12584, of "Constitutive Equations and Punch-Indentation of Concrete", EM6:Dec 75:889:11809
Dsc, ST12:Dec 76:2378:12588, of "Minimum Cost Selection of One-Way Slab Thickness", ST12:Dec 75:2585:11785

Rajagopalan, Narayanan
See David J. Victor, ST7:July 76:1337:12249

Rajaratnam, Nallamuthu
Flow Characteristics of Sloping Channel Jumps, with Valupadas Mura Hari, HY6:June 74:731:10594
Dsc: Subhash C. Mehrotra, HY4:Apr 75:419: 11209; B. S. Pani and V. V. Jayaraman, HY7: July 75:1016:11399
Clo: HY5:May 76:681:12092
TR:141:81
Roughness Effects on Rectangular Free Overfall, with Durfakula Muralidhar and Spyridon Beltaos, HY5: May 76:599:12152
Dsc, HY12:Dec 76:1785:12586, of "Pressure Fluctuations in Submerged Jump", HY3:Mar 76: 339:12004
See Spyridon Beltaos, HY10:Oct 74:1313:10852

Rajasekaran, Sundaramoorthy
Incremental Finite Element Matrices, with David W. Murray, ST12:Dec 73:2423:10226
Dsc: Zdenek P. Bazant, ST9:Sept 74:1976:10772; Carlos A. Felippa, ST12:Dec 74:2521:10977
Clo: ST8:Aug 75:1701:11471
TR:141:7
Dsc, ST9:Sept 75:1988:11537, of "Inelastic Spatial Stability of Restrained Beam-Columns", ST11:Nov 74:2235:10919
Dsc, EM5:Oct 75:717:11598, of "Inelastic Stability of Beams under Biaxial Bending", EM5:Oct 74:965: 10881

Raksit, Sagar K.
See William F. Garber, EE3:June 75:319:11357

Ramachandran, S. V.
See R. S. Srinivasan, TN: EM3:June 76:569:12168

Ramachandra Rao, Bellur S.
End Effects in Long Curved Beam, with S. Gopalacharayulu and N. B. Shukla, EM1:Feb 76: 19:11920

Ramage, John
See Loren R. Anderson, Preprint No.2718, Apr 76, 20pp.

Ramakrishnan, Venkataswamy
Comparison of Three-Dimensional Analysis of Concrete Shear Wall Buildings and Their Actual Behavior, ST76:Aug 76:95
Past and Future of Concrete Quality Control, CO2: June 76:263:12187
See L. Srinivasa-Iyer, CO3:Sept 75:593:11574

Raman, Harihara
Forces due to Nonlinear Waves on Vertical Cylinders, with Paruchuri Venkatanarasaiah, WW3: Aug 76:301:12326
Dsc, with Paruchuri Venkatanarasaiah, WW3:Aug 75: 299:11473, of "Nonlinear Wave Forces on Halfcylinder and Hemisphere", WW3:Aug 74:189: 10710
Dsc, with N. Jothi Shankar and Jade Dattatri, WW1: Feb 76:99:11882, of "Wave Induced Pressures on Submerged Plates", WW1:Feb 75:59:11098
See Jade Dattatri, WW3:Aug 76:352:12284
See Jade Dattatri, WW3:Aug 76:363:12284

Raman, Venkataraman
See Varadharaja Dakshanamurthy, GT6:June 75:588: 11339

Ramanathan, B.
A New Concept for the Relative Rigidity of Rafts, NMG:June 76:I-489

RamanathanIyer, T. S.
Dsc, with S. J. Nigli, GT:Jan 76:113:11816, of "Pore and Eroding Fluid Influences on Surface Erosion on Soil", GT1:Jan 75:51:11078

Ramanujam, Gnanadesikam
Dsc, TE2:May 74:533:10508, of "Planning Criteria for Bikeways", TE3:Aug 73:609:9928
Dsc, TE2:May 75:404:11272, of "Need for Estimated Cement Requirements for Stabilizing Lateritic Soils", TE2:May 74:379:10534

Ramberg, Steven E.
Dsc, ST9:Sept 76:1954:12366, of "Natural Vibrations of Suspension Cables", ST11:Nov 75:2277:11712

Ramey, Melvin R.
Interactive Computer Design of Reinforced Concrete Beams and Columns, Preprint No.2737, Sept 76

Rampetsreiter, Robert H.
See Kuang-Han Chu, TN: ST8:Aug 76:1629:12288

Ramsay, James A.
Dsc, GT12:Dec 75:1297:11743, of "Subsidence Over Soft Ground Tunnel", GT1:Jan 75:35:11074

Ramsey, Fred L.
See John H. Nath, Preprint No.2691, Apr 76, 10pp.

Ranade, S. V.
See N. Sriramulu, EE2:Apr 75:271:11205

Randall, Clifford W.
Temperature Effects on Aerobic Digestion Kinetics, with James B. Richards and Paul H. King, EE5:Oct 75:795:11646
Dsc: Henry H. Benjes, Jr., EE2:Apr 76:500: 12010; Michael S. Gould and Raymond F. Drnevich, EE5:Oct 76:1127:12436
TR:141:471
See Larry D. Bennefield, EE1:Feb 75:189:11084
See Paul H. King, EE4:Aug 75:479:11531
See Larry D. Bennefield, EE4:Aug 76:874:12277

Randolph, Verle G.
See Jamal J. Azar, TE1:Feb 75:163:11122

Raney, Donald C.
Landslide Generated Water Wave Model, with H. Lee Butler, HY9:Sept 76:1269:12425

Rangan, B. Vijaya
See Kevin D. Below, ST8:Aug 75:1645:11480

Ranganna, Ganganna
See T. G. Babu Rao, HY10:Oct 75:1361:11600

RangaRaju, Kittur G.
Dsc, HY4:Apr 75:428:11209, of "Transformation of Moody Diagram", HY6:June 74:797:10624
See Akalank K. Jain, HY11:Nov 75:1451:11672

Ranjan, Ganapathy V.
Analysis of Torispherical Pressure Vessels, with Charles R. Steele, EM4:Aug 76:643:12335

Ranjan, Gopal
Dsc, with Shamsher Prakash, GT9:Sept 75:983: 11534, of "In-situ Shear Test for Rock Fills", GT9: Sept 74:1031:10823

Ranken, Randall E.
See Bijan Mohraz, CO1:Mar 75:127:11174

Rao, A. R.
Characterization and Models of the Watershed Storage Process, with Pen-Chih Tao and C. Rukvichai, Preprint No.2663, Apr 76, 27pp.

Rao, C. R.
Dsc, HY9:Sept 75:1284:11535, of "Oscillations in Surge Tanks", HY10:Oct 74:1369:10891

Rao, Ramachandra A.
See Jacques W. Delleur, HY6:June 76:795:12164
See Maria Mimikou, WW76:Aug 76:399

Rao, Srikanth
Future of Highways, Fiscal Constraints, with Thomas D. Larson and Theodore H. Poister, Preprint No.2768, Sept 76, 24pp.

Rao, V. Seetharama
Optimal River Cross Sections for Flood Routing, with Dinshaw N. Contractor and Chinchai Tiyamani, WW76:Aug 76:421

Raphelt, Nolan K.
See Phil G. Combs, WW76:Aug 76:232

Rasmusen, Hans Jorgen
Simplified Optimization of Water Supply System, EE2:Apr 76:313:12026
Dsc: Robert B. Robinson, EE6:Dec 76:1305:12583

Rastogi, Ashok K.
See Robert J. Keller, HY9:Sept 75:1171:11581

Ratay, Robert T.
Dsc, EI4:Oct 76:485:12437, of "Proposed Professional Advancement Recognition (PAR) Program", EI1:Jan 76:117:11861

Rathbun, Ronald E.
See Doyle W. Stevens, EE4:Aug 76:869:12277

Raudkivi, Arved J.
Soil Moisture Movement by Temperature Gradient, with Nguyen Van U'u, GT12:Dec 76:1225:12645

Ravindra, Mayasandra K.
Illustrations of Reliability-Based Design, with Niels C. Lind and Wilfred W.C. Siu, ST9:Sept 74:1789:10779
Dsc: Reidar Bjorhovde, ST8:Aug 75:1714:11471
Clo: ST1:Jan 76:291:11819
TR:141:85
See Niels C. Lind, ST9:Sept 76:1741:12426

Rawlins, Stephen L.
See Jan van Schilfgaarde, IR3:Sept 74:321:10822

Ray, Gordon K.
Concrete Applications in Transportation Construction (1891-1976), Preprint No.2745, Sept 76, 29pp.
Slipform Pavers Prove Their Versatility, with Edwin C. Lokken and Robert G. Packard, TE4:Nov 75:721:11725
TR:141:450
Dsc, CO4:Dec 75:941:11740, of "A History of Joints in Concrete Pavements", CO1:Mar 75:29:11201

Raymond, Gerald P.
See Paul N. Gaskin, TE2:May 76:377:12134
See Otto J. Svec, NMG:June 76:1-540

Raynaud, Daniel A.
See E. D'Appolonia, GT76:Aug 76:55

Razzaq, Zia
Dsc, EI4:Oct 76:483:12437, of "Inequities in Minority Engineer Education", EI4:Oct 75:499:11666

Rebelo, Jorge
See Francis Chin, TE1:Feb 76:47:11890

Reck, H. Peter
Inelastic Strength of Cold-Formed Steel Beams, ST11:Nov 75:2193:11713
Dsc: C. N. Srinivasan, ST6:June 76:1289:12166; David Allen, ST7:July 76:1521:12226
TR:141:464

Recker, Wilfred W.
Attitudinal Variables in Civil Engineering Design, with George C. Lee, EI1:Jan 76:55:11862
See Stanley T.L. Lung, TE1:Feb 76:161:11931

Reckert, Robert D.
Trends in P.E. License Renewal Requirements, EI4:Oct 75:449:11667
Dsc: John R. Christofferson, EI3: 07:397:12223
TR:141:511

Reddy, Annapareddy S.
Seepage from Trapezoidal Canal in Anisotropic Soil, with Udayaditya Basu, IR3:Sept 76:349:12386

Reddy, Y. R.
Vortex Suppression in Stilling Pond Overflow, with John Pickford, HY11:Nov 74:1685:10969
Dsc: Roger L. Hughes, HY9:Sept 75:1291:11535; Kamil H.M. Ali, HY9:Sept 75:1293:11535
Errata: HY12:Dec 75:1543:11744
Clo: HY6:June 76:780:12164
TR:141:168

Redel, Carl
Dsc, GT7:July 75:11398, of "Reducing Negative Friction with Bitumen Slip Layers", GT8:Aug 74:925:10764

Redner, Alex S.
Photoelastic Model of Bridge Cross-Frame Junction, with Leonard Pompa, EM4:Aug 76:659:12347

Redwine, Cooper N.
See Roger B. Trent, UP1:Aug 76:225:12361

Redwood, Richard G.
See Albert W.G. Hanna, PO1:May 73:105:9701

Reed, Charles Emory
Memoir of, TR:141:550

Reed, Joseph R.
Evaluation of Friction Slope Models, with Albert J. Wolfkill, WW76:Aug 76:1159
Dsc, HY1:Jan 75:204:11038, of "Transformation of Moody Diagram", HY6:June 74:797:10624
Dsc, HY7:July 76:1066:12225, of "Solid Particle Settlement in Open-Channel Flow", HY7:July 75:917:11460

Reed, Lloyd A.
Sediment Control during Highway Construction in Central Pennsylvania, IR76:July 76:497
See William G. Weber, Jr., CE:Mar 76:76

Reed, Paul M.
Dsc, GT6:June 76:657:12163, of "A Case History of Expansive Claystone Damage", GT9:Sept 75:933:11590

Reed, Sherwood C.
Dsc, CE:Sept 76:32, on Sewage Effluent Turned to Snow: Provides Storage, Removes Pollutant, CE:May 76:88

Reedy, William W.
Water for the Valley of the Sun, Preprint No.2782, Sept 76, 27pp.

Reemsnyder, Harold S.
Fatigue Life Extension of Riveted Connections, ST12:Dec 75:2591:11795
Dsc: Eugene Chesson, Jr., ST9:Sept 76:1964:12366
TR:141:508

Reese, Lymon C.
Behavior of Drilled Piers under Axial Loading, with Fadlo T. Touma and Michael W. O'Neill, GT5:May 76:493:12135
Lateral Loading of Deep Foundations in Stiff Clay, with Robert C. Welch, GT7:July 75:633:11456
TR:141:372
See Fadlo T. Touma, GT7:July 74:749:10651

Reese, Raymond C.
Aesthetics is a Do-It-Yourself Project, ST76:Aug 76:33

Reeves, M. Douglas
See Hotten A. Elleby, ST12:Dec 76:2285:12625

Rehak, Daniel R.
See Roberta H. Ewald, EI2:Apr 75:175:11228

Rehberger, Glenn W.
See Paul H. King, EE4:Aug 75:479:11531

Reid, Jim
Integrated Evaluation Programs for Fairfax County, Va., UP1:Aug 76:137:12332

Reid, Leroy C., Jr.
Chlorine Disinfection of Low Temperature Waters, with Dale A. Carlson, EE2:Apr 74:339:10443
Dsc: C. Venkobachar, A. V.S. Prabhakara Rao and G. D. Agarwal, EE2:Apr 75:268:11205
Clo: EE6:Dec 75:1027:11741
TR:141:63

Reid, Robert O.
Wind-Driven Flow of Water Influenced by a Canopy, with Robert E. Whitaker, WW1:Feb 76:61:11926
See Henry Crew, EM1:Feb 76:77:11915
See Brady A. Elliott, WW4:Nov 76:425:12550

Reimold, Robert J.
Use of Remote Sensing for Mapping Wetlands, with Rick A. Linthurst, TE2:May 75:189:11293
TR:141:172

Rein, Robert G., Jr.
Creep of Sand-Ice System, with Vidyutkumar V. Hathi and Cedomir M. Sliepcevich, GT2:Feb 75:115:11134
Dsc: Waddah Akili, GT1:Jan 76:115:11816
Clo: GT9:Sept 76:1022:12363
TR:141:207

Reinhold, Timothy A.
Effects of Turbulence on Bridge Model Torsional Stability, with Henry W. Tieleman and Francis J. Maher, ST5:May 76:1003:12118
Wake Study of Stiffening Truss and Box Girder, with Henry W. Tieleman and Francis J. Maher, ST9:Sept 76:1643:12372

Reinschmidt, Kenneth F.
Building Construction Management Game, with James W. Litchfield and Steven D. Hunt, EI2:Apr 75:117:11248
TR:141:250
Construction Cash Flow Management System, with Walter E. Frank, CO4:Dec 76:615:12610
Productivity in Engineering Design, PROD:Aug 76:21
Review of Structural Optimization Techniques, Preprint No.2765, Sept 76, 20pp.
Structural Optimization by Equilibrium Linear Programming, with Thanet Norabhoompipat, ST4:Apr 75:919:11219
TR:141:225

Reiss, Martin L.
Young Pedestrian Safety (The School Walking Trip), with H. Douglas Robertson, BP75:Dec 75:389
See Allen E. Shinder, BP75:Dec 75:366

Reissner, Eric
Transverse Bending of Laminated Anisotropic Plates, TN: EM3:June 76:559:12168

Remson, Irwin
See Eduardo Aguado, HY7:July 74:869:10639

Remus, Thomas A.
Dsc, CO4:Dec 76:693:12582, of "Concepts of Project Planning and Control", CO1:Mar 76:67:11984

Renard, Kenneth G.
Dynamic Behavior Model of Ephemeral Stream, with Emmett M. Laursen, HY5:May 75:511:11315
Dsc: Roger E. Smith and Donald L. Chery, HY3:Mar 76:432:11950
Clo: HY11:Nov 76:1697:12508
TR:141:327
Dsc, IR3:Sept 75:240:11536, of "Estimation of Rainfall Erosion Index", IR3:Sept 74:293:10817
Dsc, with J. Roger Simanton, IR3:Sept 75:242:11536, of "Estimation of Rainfall Erosion Index", IR3:Sept 74:293:10817

Rendon-Herrero, Oswald
Estimation of Washload Produced on Certain Small Watersheds, HY7:July 74:835:10638
Dsc: Emmett M. Laursen, HY1:Jan 75:208:11038; Vaclav Kolar, HY7:July 75:1018:11399
Clo: HY7:July 76:1061:12225
TR:141:86
Inequities in Minority Engineer Education, EI4:Oct 75:499:11666
Dsc: Mohammad Iqbal, EI4:Oct 76:482:12437; Zia Razzaq, EI4:Oct 76:483:12437
TR:141:501

Renton, John D.
Dsc, ST1:Jan 75:341:11039, of "Warping and Distortion at I-Section Joints", ST3:Mar 74:547:10390

Rentschler, Glenn P.
See Wai F. Chen, ST76:Aug 76:957

Resio, D. T.
Extreme Wave Heights for Cleveland Harbor, OE75:June 75:62

Revell, Russell W.
Dsc, CE:July 75:38, on Corps Guidelines for Dam Safety Inspection Need Revamping, CE:Jan 75:74
Dsc, CE:July 75:38, on The National Dam Inspection Program, CE:Apr 75:75

Reynolds, Gardner M.
Liability of Consultants in Dam Investigations, EFRLD:Sept 75:157

Reynolds, Glenn E.
Dsc, CO4:Dec 74:651:10970, of "Basic Construction Principles in Higher Latitudes", CO1:Mar 74:33:10399

Reynolds, James H.
Biomass Distribution and Kinetics of Baffled Lagoons, with Stephen B. Nielson and E. Joe Middlebrooks, EE6:Dec 75:1005:11787
Dsc: Sorab Arceivala, EE5:Oct 76:1130:12436
TR:141:520

Reynolds, Peter J.
Environmental Implications of Increased Agricultural Production in International River Basins, IR76:July 76:394

Rhee, Hee Chong
See R. Richard Avent, TN: ST3:Mar 76:691:11956

Rhoades, James D.
See Jan van Schilfgaarde, IR3:Sept 74:321:10822

Rhomberg, Edward J.
See Yogindra N. Anand, ST76:Aug 76:1060

Ribacchi, Renato
See Paolo Biondi, NMG:June 76:I-591
See Giovanni Manfredini, NMG:June 76:II-859

Ribakoff, Solomon
Dsc, CE:Oct 75:30, on Protecting Your Firm against Liability Claims, CE:June 75:66

Ribbens, Richard W.
Irrigation Return Flow Modeling for the Souris Loop, with Marvin J. Shaffer, IR76:July 76:545

Ribble, George E.
Flood Peaks in Southern California Desert Areas, WW76:Aug 76:1094

Riccioni, Roberto
See Paolo Biondi, NMG:June 76:I-591
See Giovanni Manfredini, NMG:June 76:II-859

Rice, Ernest Graham
Memoir of, TR:141:551

Rice, Gary A.
See John L. Cleasby, EE5:Oct 75:713:11642

Rice, Leonard
Dsc, EE3:June 75:464:11337, of "Volume of Storm Water Retention Basins", EE5:Oct 74:1165:10889
Dsc, HY1:Jan 76:11817, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445

Richard, Jacques
See E. D'Appolonia, GT76:Aug 76:55

Richard, Ralph M.
See Kyle L. Peyton, ST10:Oct 76:2092:12441

Richards, Adrian F.
See Alexander D. Smith, OE75:June 75:421

Richards, Frederick J., Jr.
Survival in the Legal Jungle, Preprint No.2761, Sept 76, 4pp.

Richards, Hoy A.
See Hal B.H. Cooper, Jr., EE4:Aug 76:723:12312

Richards, James B.
See Clifford W. Randall, EE5:Oct 75:795:11646

Richards, John A.
Wood Shear Panels Bonded with Flexible Adhesives, with Robert P. Kerfoot and Gordon P. Krueger, ST1:Jan 75:131:11056
TR:141:163

Richards, Richard T.
Perforated-Pipe Water Intake for Fish Protection, with Mark J. Hroncich, HY2:Feb 76:139:11900
Dsc: Anand Prakash and V. S. Shastri Annambhotla, HY12:Dec 76:1780:12586; M. Quazi, HY12:Dec 76:1782:12586

Richards, Robert O., Jr.
See Kenneth A. Brewer, TE2:May 76:271:12126

Richards, Robert W.
An Employer's Evaluation of Cooperative Education, EI2:Apr 75:221:11238
TR:141:233
Engineering Education: Can It be More Practical?, CE:July 75:60
Dsc: John D. Grubbs, CE:Nov 75:28; Frederick G. Lehman, CE:Dec 75:30; Stuart G. Walesh, CE:Dec 75:30
TR:141.286

Richards, Rowland, Jr.
Stresses on Shallow Circular Pipe by Transformed Section, with Jagdish S. Agrawal, GT6:June 74:637:10631
Dsc: Subhash C. Anand, GT1:Jan 75:79:11037
Clo: GT7:July 75:696:11398
TR:141:70
Viaducts—A Case Study, with David G. Elms, EI4:Oct 74:293:10845
Errata: EI4:Oct 75:523:11597
TR:141:50
See Naveed K. Burki, GT2:Feb 75:129:11135

Richardson, Burl R.
Commentary on Safety Factors in Plastic Design, TN: CO4:Dec 76:683:12590

Richardson, Everett V.
River Response to Development, with Daryl B. Simons, WW76:Aug 76:1285
See Michael A. Stevens, HY5:May 75:557:11334
See Fred D. Theurer, WW76:Aug 76:793
See A. D. Berryman, WW76:Aug 76:1350
See Fred D. Theurer, WW76:Aug 76:1497

Richardson, George C.
Lower Granite Lock — Prototype Performance, WW76:Aug 76:1442

Richardson, Gregory N.
Seismic Design of Reinforced Earth Walls, with Kenneth L. Lee, GT2:Feb 75:167:11143
Dsc: Ura G. Rieder and Heinz Staggl, GT3:Mar 76:262:11949
Clo: GT9:Sept 76:1024:12363
TR:141:225

Richart, Frank E., Jr.
Some Effects of Dynamic Soil Properties on Soil-Structure Interaction, GT12:Dec 75:1193:11764
Dsc: Michael J. Pender, GT12:Dec 76:1281:12585
TR:141:518
See Kenneth H. Stokoe, II, GT4:Apr 74:427:10499
See Chyr Pyng Liou, Preprint No.2752, Sept 76, 30pp.
See Donald G. Anderson, GT9:Sept 76:975:12428

Richerson, Peter
Environmental Values and Water Quality Planning, with Robert Johnston, HY2:Feb 75:259:11136
TR:141:221

Rickerd, Wayne L.
Hawaii's Offshore Runway, Preprint No.2696, Apr 76, 19pp.

Rieder, Ura G.
Dsc, with Heinz Staggl, GT3:Mar 76:262:11949, of "Seismic Design of Reinforced Earth Walls", GT2:Feb 75:167:11143

Riggs, Henry C.
Effects of Man on Low Flows, IR76:July 76:306
Dsc, HY11:Nov 73:2133:10109, of "Floods Predicted From Rainfall Frequencies", HY10:Oct 72:1773:9294

Riley, J. Paul
See David S. Bowles, HY9:Sept 76:1225:12405

Rim, Kwan
See Jasbir S. Arora, ST10:Oct 75:2063:11633

Riordan, Courtney
Local and Regional Economic Impacts of Energy Complexes, EFEEC:Aug 75:312

Ritchie, Jerry C.
See J. Roger McHenry, WW76:Aug 76:1339

Ritter, Robin
Dsc, Ocean Dumping-No Relief, CE:Dec 76:27

Rives, S. R.
See H. H. Carter, OE75:June 75:1420

Rizzo, Paul C.
Vertical Seismic Response Spectra, with Donald E. Shaw and Matthew D. Snyder, PO1:Jan 76:121:11858
Dsc: John A. O'Brien, PO2:Nov 76:234:12509
Dsc, STN75:Dec 75:II-269, of "Consideration of Finite Element Representation", STN75:Dec 75:II-246
See John R. Hall, Jr., GT6:June 76:650:12163
See Y. Cho, Preprint No.2752, Sept 76, 28pp.

Roa, William J., Jr.
See Alfred E. Schmidt, CO3:Sept 76:570:12362

Roake, A. F.
See Michael R. Garrett, WW76:Aug 76:650

Robbins, Lamont G.
Roughness Characteristics of the Lower Mississippi, WW76:Aug 76:1209

Roberts, Charles W.
Seismic Qualification — Philosophy and Methods, with George D. Shipway, PO1:Jan 76:113:11822

Roberts, Clifford A.
See Alfred J. Cooper, PO1:Jan 76:63:11825

Roberts, G. W.
See Roland W. Lewis, NMG:June 76:II-1106

Roberts, J. Brian
First Passage Probability for Nonlinear Oscillators, EM5:Oct 76:851:12469

Roberts, Keith E.
Job-Site Innovations Slash Time, Cost of Constructing Canada's Tallest Skyscraper, CE:Aug 76:42

Roberts, Kenneth C.
See Wayne F. Palmer, CO1:Mar 75:37:11183

Roberts, Richard
Fatigue and Fracture of Bridge Steels, with George R. Irwin, ST2:Feb 76:337:11913

Roberts, Wyndham J.
Economic Value of Dredged Material, DIEE:Jan 76: 919
Dsc, WW1:Feb 75:117:11091, of "Development and Future of Dredging", WW2:May 74:69:10513

Robertson, H. Douglas
See Martin L. Reiss, BP75:Dec 75:389

Robin, Sidney
Protecting Your Firm against Liability Claims, with Joseph R. Syrnick, CE:June 75:66
Dsc: Albert A. Mathews, CE:Sept 75:38; Larry A. Cooper, CE:Sept 75:38; G. J.K. Asmis, CE:Oct 75:30; Solomon Ribakoff, CE:Oct 75:30; William F. Loftus, CE:Dec 75:52; Thomas Carcaterra, CE:Jan 76:26
TR:141:259

Robinson, James H., Jr.
See R. Richard Avent, ST5:May 76:1015:12108

Robinson, Lee
Floods Predicted From Rainfall Frequencies, with Theodore T. Williams, HY10:Oct 72:1773:9294
Dsc: Henry C. Riggs, HY11:Nov 73:2133:10109
Clo: HY6:June 76:779:12164
TR:141:7

Robinson, Millard P., Jr.
Dsc, with Oner Yucel, WW1:Feb 76:97:11882, of "Analytical Model of Hydraulic Pipeline Dredge", WW1:Feb 75:33:11097

Robinson, Robert B.
Cost Optimization of Rural Water Systems, with T. Al Austin, HY8:Aug 76:1119:12301
Dsc, EE6:Dec 76:1305:12583, of "Simplified Optimization of Water Supply System", EE2:Apr 76:313:12026

Robitaille, Albert L.
Wave Climate at Plymouth, Massachusetts, OE75: June 75:1152

Robson, C. Michael
See Shankha K. Banerji, EE6:Dec 74:1283:10971

Rocheford, M. A.
Dsc, Visiting Barbados?, CE:Dec 76:26

Rockaway, John D.
Engineering Geologic Data for Land-Use Planning, UP2:Nov 75:117:11681
TR:141:425

Rockwell, Philip K.
Recent Developments in Underwater Construction, Preprint No.2669, Apr 76, 28pp.

Roddin, Marc F.
See Ronald L. Braun, BP75:Dec 75:406

Roderick, Jack William
See Peter Ansourian, ST8:Aug 76:1609:12320

Rodgers, Jane
Integrated Evaluation from a Regional Perspective, with George V. Wickstrom, UP1:Aug 76:125:12338

Rodrigues, Joaquim S.N.
Node Numbering Optimization in Structural Analysis, ST2:Feb 75:361:11117
TR:141:191

Rodriguez, Alvaro
See Ernest Winter, GT75:June 75:II-271

Roembke, James E.
Dsc, CE:Sept 76:36, on "Wind Resistant Design Concepts for Residences," by Delhart B. Ward (Book Review), CE:June 76:38

Roesset, Jose M.
Dynamic Soil Structure Interaction, NMG:June 76:I-3
See Eduardo Kausel, EM5:Oct 75:679:11652
See Eduardo Kausel, EM6:Dec 75:771:11800
See G. W. Blaney, NMG:June 76:II-1001
See George C. Gazetas, ST76:Aug 76:115
See Eduardo Kausel, GT11:Nov 76:1159:12579

Rogers, C. Leland
Session V —Ecology, EFEEC:Aug 75:417

Rogers, Cranston R.
Dsc, CE:Mar 76:22, on Conglomerate Takeover of Consulting Firms: An Opinion, CE:Sept 75:111

Rogers, Earl
Design Lead Time Predictions, TE4:Nov 76:737: 12569

Rogers, Franklyn
1976 Rickey Medal Presented to Franklyn Rogers and Edward Loane, with Edward Loane, CE:Oct 76:100

Rogers, Jerry R.
See Charles W. Warner, Jr., Preprint No.2682, Apr 76, 16pp.
See L. Douglas James, Preprint No.2754, Sept 76, 30pp.

Rogers, Larry W.
See Edwin G. Burdette, ST7:July 75:1455:11432

Rogers, W. R.
Dsc, CO4:Dec 74:652:10970, of "Basic Construction Principles in Higher Latitudes", CO1:Mar 74:33: 10399

Rogers, William R.
See Joseph Peraino, CE:Apr 76:82

Rohatgi, Naresh K.
Fate of Metals in Wastewater Discharge to Ocean, with Kenneth Y. Chen, EE3:June 76:675:12194

Romano, Amardo J.
Lower Minnesota River — Capacity Study, WW76: Aug 76:687

Romstad, Karl M.
Integrated Study of Reinforced Earth-I: Theoretical Formulation, with Leonard R. Herrmann and Chih-Kang Shen, GT5:May 76:457:12144
See Chih-Kang Shen, GT6:June 76:577:12210

Romualdi, James P.
Predicting Demand for Engineered Facilities, EI3: July 75:365:11426
TR:141:405

Roney, James R.
See Joseph T. DeAlteris, OE75:June 75:225

Rood, Harry
Offshore Nuclear Power Plants Workshop Results, with William S. Gaither, OE75:June 75:58

Roorda, John
Tendon Control in Tall Structures, ST3:Mar 75:505: 11168
Dsc: William Zuk, ST9:Sept 75:1993:11537
TR:141:210

Roos, Amos
Dsc, CE:Aug 75:34, on Environmental Impact Reports: Problems and Opportunities, CE:May 75: 71

Root, Morris J.
See Robert M. Ragan, HY9:Sept 75:1185:11580

Roper, Ralph E., Jr.
Dsc, with Glen T. Daigger and C. P. Leslie Grady, Jr., EE4:Aug 74:1048:10693, of "Design and Operation Model of Activated Sludge", EE6:Dec 73:773:10220

Rosanski, Kenneth F.
Session VIII — Public Participation, EFEEC:Aug 75: 428

Rose, J. R.
See J. M. Brannon, DIEE:Jan 76:455

Rosebraugh, Vernon H.
See Stuart E. Swartz, ST5:May 75:1097:11298
See Stuart E. Swartz, ST10:Oct 76:1981:12455

Rosen, Harvey M.
Wastewater Ozonation: A Process Whose Time Has Come, CE:Mar 76:65

Rosenberg, Harry B.
Economics and Financial Aspects of Canadian Irrigation and Drainage Projects, IR76:July 76:640

Rosenblueth, Emilio
Method of Developing Optimum Tolerances, with Alejandro Asfura, ST2:Feb 76:323:11889
Errata: ST12:Dec 76:2396:12588
Optimum Design for Infrequent Disturbances, ST9: Sept 76:1807:12433
Optimum Seismic Design of Linear Shear Buildings, with Alejandro Asfura, ST5:May 76:1077:12119
Reliability of Prismatic Bars in Tension, with Alfredo Careaga, TN: EM3:June 76:563:12168
Errata: TN: EM6:Dec 76:1105:12584
Tall Buildings under Five-Component Earthquakes, TN: ST2:Feb 76:455:11886
Towards Optimum Design Through Building Codes, ST3:Mar 76:591:11999
Errata: ST11:Nov 76:2254:12510
1976 Alfred M. Freudenthal Medal Presented to Emilio Rosenblueth, CE:Oct 76:99

Rosenfarb, Jack L.
Directional Drying Rates for Anisotropic Clays, with M. Salah Abdelhamid and Raymond J. Krizek, TN: GT2:Feb 76:188:11885

Rosenshine, Matthew
Dsc, CO4:Dec 76:694:12582, of "Bidding Models: Truths and Comments", CO1:Mar 76:169:11991

Roskopf, Robert F.
Trickling Filter-Activated Sludge Combinations, with James C. Young and E. Robert Baumann, EE5:Oct 76:1005:12460

Ross, D. A.
See Wai F. Chen, Preprint No.2659, Apr 76, 21pp.

Ross, Duncan
Radar in Oceanography (Abstract), with Paul G. Teleki and James Wiley, OE75:June 75:1169

Ross, Timothy J.
See Walter J. Austin, ST5:May 76:1085:12149

Rossman, Lewis A.
See Jon C. Liebman, EE1:Feb 75:181:11085

Rossow, Edwin C.
Efficient Design-Analysis of Physically Nonlinear Trusses, with David L.C. Lo and Shih-Lung Chu, ST4:Apr 75:839:11257
TR:141:261

Rossow, Janet Ann Koch
Management Issues in the U.S. Construction Industry, with Fred Moavenzadeh, CO2:June 76: 277:12184

Roth, Wolfgang
See Kenneth L. Lee, Preprint No.2662, Apr 76, 20pp.

Rothrock, D. A.
See Max D. Coon, NMG:June 76:II-1210

Rouse, Jim V.
Removal of Heavy Metals from Industrial Effluents, EE5:Oct 76:929:12447

Rouve, Gerhard
See Horst Indlekofer, HY3:Mar 75:385:11178
See Ekkehard Heinemann, PO1:Jan 76:53:11833

Rowe, Nina Dougherty
The Energy Crisis/Bicycles/Federal Government, BP75:Dec 75:19

Roy, M.
Dsc, GT75:June 75:II-164, of "Measurement of In Situ Strength", GT75:June 75:II-57

Roy, Nikhilesh
Strain Rate Behavior of Compacted Silt, with Parth Sarathi, GT4:Apr 76:347:12024

Royster, David L.
Tackling Major Highway Landslides in the Tennessee Mountains, CE:Sept 75:85
TR:141:364

Rozvany, George I.N.
Optimal Design of Multiload Multispan Systems, TN: EM6:Dec 76:1085:12591
Optimal Slabs and Grillages of Constrained Geometry, with Chinappa Gangadharaiah and Robin D. Hill, EM6:Dec 75:755:11797
Errata: EM6:Dec 76:1095:12584
TR:141:472

Rubin, Robert A.
Fifty Years of Construction Law, CO4:Dec 75:703: 11758
Dsc: Nathan Meyer, CO3:Sept 76:571:12362
TR:141:462
Dsc, CE:May 76:32, on William D. Henderson: Man, Engineer, Priest Minister, CE:Mar 76:63
See Stephen E. Smith, CO4:Dec 75:907:11776
See Louis Cantor, CO4:Dec 75:923:11767

Ruez, William J.
Exxon's 850-ft Platform for Santa Barbara Channel, OE75:June 75:801

Ruff, James F.
Remote Sensing of Mississippi River Characteristics, with Morris M. Skinner, Brien R. Winkley, Daryl B. Simons and Dennis E. Dorratcague, WW2:May 76:189:12150

Ruff, Paul F.
Dsc, CE:May 75:24, on Improving Your Writing, CE:Jan 75:60

Rukvichai, C.
See A. R. Rao, Preprint No.2663, Apr 76, 27pp.

Ruma, R. E.
See J. R. Dunkelberg, CE:Aug 75:32

Runyan, Marvin W.
Progress Report on Development of A Code of Ethics, EI2:Apr 75:199:11225
TR:141:204

Ruska, William F.
See Kenneth L. Dickson, HY7:July 75:965:11463

Russell, Alan D.
Canadian University to Launch Building-Engineering Program, with Paul P. Fazio, CE:Apr 75:86
TR:141:179
Information Models in Building Design Process, EI2:Apr 75:133:11217
TR:141:194

Russell, James E.
See L. Srinivasa-Iyer, CO3:Sept 75:593:11574

Russell, Randolph
See Herbert W. Busching, CO3:Sept 75:565:11577

Russell, Samuel O.
Use of Decision Theory in Reservoir Operation, HY6:June 74:809:10586
Dsc: Lucien Duckstein and Istvan Bogardi, HY3:Mar 75:558:11148; John A. Burnes, HY5:May 75:628:11270
Clo: HY11:Nov 75:1442:11672
TR:141:69
See W. F. Caselton, WR1:Apr 76:163:12089
See Stanley Hershman, TN: EE6:Dec 76:1281:12638

Russo, Edwin P.
Flow of Pollutants through a Lock, TN: WW2:May 76:267:12096

Rutenberg, Avigdor V.
Torsional Analysis of Perforated Core Structure, with Wai K. Tso, ST3:Mar 75:539:11167
Dsc: Himat T. Solanki, ST11:Nov 75:2458:11675
Clo: ST5:May 76:1164:12093
TR:141:210
Dsc, ST8:Aug 75:1727:11471, of "Wall-Beam Frames under Static Lateral Load", ST2:Feb 75:377:11121

Rutherford, J. Christopher
Simulation of Water Quality in Tarawera River, with Michael J. O'Sullivan, EE2:Apr 74:369:10461
Dsc: Donald J. O'Connor, Dominic M. DiToro and Claudia S. Zahorcak, EE2:Apr 75:280:11205; Tagadur P. Halappa Gowda, EE2:Apr 75:283:11205
Clo: EE6:Dec 75:1030:11741
TR:141:84

Rutherford, Thomas L.
See Willard J. Cotton, HY10:Oct 75:1371:11600

Ruzecki, Evon P.
See A. Y. Kuo, OE75:June 75:1065

Ryther, John H.
See Joel C. Goldman, EE3:June 75:351:11358

Saada, Adel S.
Strength of One Dimensionally Consolidated Clays, with Gary F. Bianchini, GT11:Nov 75:1151:11707
Dsc: Ravikumar Bhaskaran, GT11:Nov 76:1204:12507
TR:141:514
Dsc, GT7:July 76:819, of "Elastoplastic Stress-Strain Theory for Cohesionless Soil", GT10:Oct 75:1037:11670
Dsc, GT7:July 76:823:12224, of "Anisotropy in Heavily Overconsolidated Kaolin", GT12:Dec 75:1277:11808

Sabnis, Gajanan M.
An Investigation of the Effective Width of the Reinforced Concrete T-Beam, with William D. Lord, Preprint No.2746, Sept 76, 30pp.

Sadeh, Willy Z.
See James F. Costello, STN75:Dec 75:II-21

Sadek, Edward E.
See M. Ezzat Mohsin, ST1:Jan 76:125:11844

Sadigh, Khosrow
See Izzat M. Idriss, GT7:July 76:663:12246

Saenz, Luis P.
Dsc, EI3:July 74:261:10633, of "Art in Engineering - The Need for a New Criticism", PP4:Oct 73:499:10102

Saffir, Herbert S.
"Wind Resistant Design Concepts for Residences," by Delhart B. Ward (Book Review), CE:June 76:38
Dsc: James E. Roembke, CE:Sept 76:36
Dsc, CE:July 75:38, on Civil Engineering History Gives Valuable Lessons, CE:May 75:48

Safford, Frederick B.
See Sami F. Masri, EM1:Feb 76:151:11923

Sahagun, Virgilio A.
See Armando Ballofet, WW76:Aug 76:170

Saigal, Krishan K.
See Jong-Song Chien, HY8:Aug 74:1141:10766

Sailor, Vance L.
Conservation of Energy in Buildings, CO3:Sept 74:295:10795
Dsc: Ananthakrishnan Sundar and P. Paramasivam, CO3:Sept 75:668:11533
TR:141:61

Saito, Kozo
See Ryuichi Iida, NMG:June 76:I-232

Saito, T.
See T. Kawamoto, NMG:June 76:II-791

Sakkas, John G.
Dimensionless Solution of Dam-Break Flood Waves, with Theodor Strelkoff, HY2:Feb 76:171:11910
Dsc: Delbert D. Franz, HY12:Dec 76:1782:12586
Generalized Nomographic Solution of Hooghoudt Equations, IR1:Mar 75:21:11182
Errata: IR4:Dec 75:319:11745
TR:141:334

Sakurai, Shunsuke
A Numerical Analysis of the Maximum Earth Pressure Acting on Tunnel Lining, with Yoshiaki Yamamoto, NMG:June 76:II-821

Salaam, U.
See Ranbir S. Sandhu, NMG:June 76:I-104

Salama, M.
Simulation of the Stress Computation in Shells, with Senol Utku, Preprint No.2737, Sept 76, 32pp.

Salem, Abdelsalam M.
Stress-Deformation-Time Behavior of Dredgings, with Raymond J. Krizek, GT2:Feb 76:139:11917
See Raymond J. Krizek, Preprint No.2640, Apr 76, 28pp.

Salem, Mohammad H.
See Bijan Mohraz, CO1:Mar 75:127:11174

Salgo, Michael N.
Report on Observations of Attendees at the EF Conference on 'Life Span of Structures', EI1:Jan 76:47:11870
Dsc: Dan H. Pletta, EI1:Jan 76:52

Saline, Lindon E.
Career Growth for the Professional Engineer, CE: Nov 75:56
TR:141:446

Salmon, Martin A.
Rigid Plastic Beam Model for Pipe Whip Analysis, with Vijay K. Verma, EM3:June 76:415:12206

Salse, Eduardo
Structural Fire Resistance of Concrete, with Tung D. Lin, ST1:Jan 76:51:11835
Errata: ST11:Nov 76:2252:12510

Salter, Winfield O.
Productivity as Influenced by Design Management Processes, PROD:Aug 76:1

Saltzman, Arthur
See Alice E. Kidder, TE3:Aug 76:571:12340

Salvadori, Mario G.
The Code of Ethics of the American Society of Civil Engineers, EI2:Apr 75:215:11252
TR:141:278
Historical Sites and the Construction Engineer, CO2: June 76:295:12183

Samad, Md. Abdus
See Ruh-Ming Li, WW76:Aug 76:1572

Samavedam, Gopalacharyulu
See Prabhu S. Kundurpi, EM5:Oct 75:517:11612

Samowitz, Charles
See Martin Lang, CE:Jan 76:54

Samson, Alexander
Some Characteristics of Mechanical Wedge System, TN: EM4:Aug 76:725:12286

Samuchin, Michael G.
AISC Code Compliance Provisions of ICES STRUDL-II, ST76:Aug 76:756

Samuel, Alfred F., Jr.
Dsc, CE:May 75:24, on The Forgotten Engineer: John Stevens and the Panama Canal, CE:Feb 75:54

Samuelson, Don F.
See John M. Smith, DIEE:Jan 76:512

Sanborn, Eugene W.
See Rick D. Cardwell, DIEE:Jan 76:684

Sandberg, L. Bogue
See Edwin P. Foster, ST8:Aug 75:1710:11471

Sanders, Wallace W., Jr.
Ultimate Load Test of Truss Bridge Floor System, with F. Wayne Klaiber, Hotten A. Elleby and Leonard W. Timm, ST7:July 76:1383:12247
See Hotten A. Elleby, ST12:Dec 76:2285:12625

Sanderson, W. H.
Sand Bypassing with Split-Hull Self-Propelled Barge Currituck, DIEE:Jan 76:163

Sandhu, Ranbir S.
Iterative Improvement of Finite Element Approximations, with U. Salaam and K. J. Singh, NMG:June 76:I-104
Variational Principles for Finite Element Analysis of Consolidation, NMG:June 76:I-20

Sandler, Ivan S.
Generalized Cap Model for Geological Materials, with Frank L. DiMaggio and George Y. Baladi, GT7:July 76:683:12243
Models of Geological Materials in Ground Shock, with Melvin L. Baron, NMG:June 76:I-219

Sangal, Beni P.
Dsc, HY1:Jan 75:205:11038, of "Transformation of Moody Diagram", HY6:June 74:797:10624

Sangster, William M.
What Has ASCE Done for Me Lately, CE:Oct :80
TR:141:529

Sanks, Robert L.
See Jerome W. Sargent, EE5:Oct 76:879:12453

Santhakumar, Arumbakkam R.
Dsc, with K. S. Ponnusamy, ST3:Mar 76:680:11952, of "Strength Decay of RC Columns under Shear Reversals", ST5:May 75:1053:11311
See Thomas Paulay, ST1:Jan 76:93:11852
See M. Lakshmipathy, ST12:Dec 76:2385:12588

Sarathi, Parth
See Nikhilesh Roy, GT4:Apr 76:347:12024

Sargent, Jerome W.
Dye Catalyzed Oxidation of Industrial Wastes, with Robert L. Sanks, EE5:Oct 76:879:12453

Sarikelle, Simsek
See G. Mavrigian, OE75:June 75:668
See Jong-Song Chien, IR3:Sept 76:307:12375

Sarne, Yoav
Dsc, ST11:Nov 75:2457:11675, of "Nonlinear Analysis of RC Shells of General Form", ST3:Mar 75:523:11164

Sarpkaya, Turgut
Dsc, WW4:Nov 76:493:12512, of "Transverse Forces on Vertical Cylinders in Waves", WW1:Feb 76:49: 11934

Sasaki, Tamio
Simulation of Shoreline and Nearshore Currents, OE75:June 75:179

Sathaye, Jayant
Aqueduct Optimization with Intermediate Storage, with Warren A. Hall, IR2:June 76:249:12180
Optimization of Design Capacity of an Aqueduct, with Warren A. Hall, IR3:Sept 76:295:12396

Sato, Seiichi
See Hiromitsu Izumi, NMG:June 76:II-701

Satter, Muhammed A.
Dynamic Behavior of Partially Embedded Pile, GT7: July 76:775:12265

Sauer, David K.
Intermittent Sand Filtration of Household Wastewater, with William C. Boyle and Richard J. Otis, EE4:Aug 76:789:12295

Saul, William E.
Response to Stochastic Wind of N-Degree Tall Buildings, with P. Jayachandran and Alain H. Peyrot, ST5:May 76:1059:12112
Dsc: Michael O'Rourke, ST12:Dec 76:2401:12588
See P. Jayachandran, ST76:Aug 76:269

Saunders, F. Michael
Dsc, EE6:Dec 74:1289:10971, of "Design and Operation Model of Activated Sludge", EE6:Dec 73:773:10220
See Byung R. Kim, EE1:Feb 76:55:11937

Savage, Stuart B.
See Rodney J. Sobey, HY12:Dec 74:1809:11026

Savage, W. Z.
See T. C. Nichols, Jr., GT76:Aug 76:34

Saxena, Narendra K.
Electro-Optical Short-Range Surveying Instruments, SU1:Oct 75:137:11630
TR:141:204
Marine Geodesy — Precise Ocean Surveys, SU1:Oct 75:73:11631
Dsc: Alden P. Colvocoresses, SU1:Dec 76:100:12589
TR:141:233
Ocean-Bottom Control Net-Unit Configuration, with Dimitrios P. Xirodimas, SU1:Dec 76:53:12642

Saxena, Surendra K.
Bearing Capacity of Offshore Gravity Structures, with W. M. Kilkenny and Joseph A. Fischer, OE75:June 75:450
Consolidation Settlement of a Layered Subsurface, with Chandrakant S. Desai and Jayant Vir, NMG:June 76:II-1082
Consolidation Settlement of a Layered Subsurface, with Chandrakant S. Desai, NMG:June 76:III-1419
See Joseph A. Fischer, OE75:June 75:1
See Robert D. Darragh, NMG:June 76:III-1441

Saylak, Don
Sulfur-Asphalt Mixtures Using Poorly Graded Sands, with Bob M. Gallaway, Jon A. Epps and Haffizudin Ahmid, TE1:Feb 75:97:11106
TR:141:121

Sayre, William W.
See Eric J. Schiller, HY6:June 75:749:11389
See Jean-Claude Tatinclaux, PO1:July 75:43:11415

Scanlan, Robert H.
See George T. Taoka, ST1:Jan 75:49:11051

Scanlan, Robert N.
Dsc, EI3:July 74:264:10633, of "Art in Engineering - The Need for a New Criticism", PP4:Oct 73:499:10102

Scanlon, Michael J.
Increased Productivity Through Effective Public Information, PROD:Aug 76:177

Scarisbrick, Richard G.
Laminated Timber Logging Bridges in British Columbia, ST1:Jan 76:19:11832

Scarpa, Amerigo
See Marvin Gates, CO1:Mar 72:79:8778
See Marvin Gates, CO4:Dec 75:853:11771
See Marvin Gates, CO4:Dec 75:861:11772
See Marvin Gates, CO2:June 76:307:12181
See Marvin Gates, CO3:Sept 76:573:12362
See Marvin Gates, TN: CO4:Dec 76:685:12590

Scavuzzo, R.
Dsc, SDNPF:Dec 73:III-50, of "Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities", SDNPF:Dec 73:III-19
See E. D'Appolonia, SDNPF:Dec 73:III-19

Schad, Hermann
See Quirin Laumans, NMG:June 76:I-475

Schad, Theodore M.
Water Resources Planning — Historical Development, Preprint No.2754, Sept 76, 22pp.

Schaffner, Charles E.
Dsc, CE:Aug 75:36, on How Concerned Should Civil Engineers be with Fire Protection?, CE:Mar 75:57

Schelling, David R.
A Review of Electronic Computing for Civil Engineering Within the Federal Government, Preprint No.2818, Sept 76, 29pp.

Schermer, Eugene B.
See John M. Smith, DIEE:Jan 76:512

Schiebe, Frank R.
Dsc, HY11:Nov 75:1456:11672, of "Temperature Dynamics in Dimictic Lakes", HY1:Jan 75:97:11058

Schierholz, Paul M.
See John D. Stevens, EE2:Apr 76:337:12034

Schiff, Gilbert M.
See C. Scott Clark, EE2:Apr 76:375:12038

Schiffman, Robert L.
Software Coordination in Geotechnical Engineering, with David M. Jubenville, NMG:June 76:II-1228
See David M. Jubenville, ST76:Aug 76:903

Schiller, Eric J.
Vertical Temperature Profiles in Open-Channel Flow, with William W. Sayre, HY6:June 75:749:11389
Dsc: M. N. Viswanathan, HY4:Apr 76:541:12014
Clo: HY12:Dec 76:1766:12586
TR:141:354

Schilling, Charles G.
Commentary on Orthotropic-Deck Bridge Specifications, ST1:Jan 74:109:10273
Dsc: Roman Wolchuk and Ronald M. Mayrbaurl, ST12:Dec 74:2525:10977
Clo: ST7:July 75:1605:11401
TR:141:8
Low-Temperature Tests of Simulated Bridge Members, with Karl H. Klippstein, John M. Barsom, Stephan R. Novak and Gilbert T. Blake, ST1:Jan 75:31:11049
Dsc: Donald S. Mansell, ST9:Sept 75:1992:11537
TR:141:153

Schimpeler, Charles C.
See John J. Jarvis, UP1:Aug 76:187:12353

Schleining, William G.
See Clarence B. Drennon, SU1:Oct 75:107:11655

Schleusener, Richard A.
Weather Modification for Use in High Plains, with J. R. Miller, Jr., IR3:Sept 74:339:10816
Dsc: John R. Christofferson, IR3:Sept 75:234:11536; Leonard J. Lane and Herbert B. Osborn, IR3:Sept 75:237:11536
TR:141:185

Schlosser, Francois
Recent Results in French Research on Reinforced Earth, with Nguyen-Thanh-Long, CO3:Sept 74:223:10800
Dsc: N. E. Simons, CO2:June 75:444:11336
Clo: CO1:Mar 76:255:11948
TR:141:76

Schmeltz, Edward J.
See Michael J. McCarthy, OE75:June 75:762

Schmertmann, John H.
Measurement of In Situ Strength, GT75:June 75:II-57
Dsc: C. Thomas Gorman, Vincent P. Drnevich and Thomas C. Hopkins, GT75:June 75:II-139; Odd S. Gregersen, GT75:June 75:II-141; Richard L. Handy, GT75:June 75:II-143; Nilmar Janbu, GT75:June 75:II-150; Charles C. Ladd, GT75:June 75:II-153; Tom Lunne, GT75:June 75:II-161; M. Roy, GT75:June 75:II-164; Richard L. Handy and Glen Ferguson, GT75:June 75:II-168; Stephen H. Nickel, GT75:June 75:II-172
Clo: GT75:June 75:II-175
Dsc, GT75:June 75:II-356, of "In Situ Measurement of Volume Change Characteristics", GT75:June 75:II-279

Schmid, Lawrence A.
Feedlot Wastes to Useful Energy — Fact or Fiction?, EE5:Oct 75:787:11647
Dsc: David Malish and Michael J. Humenick, EE4:Aug 76:872:12277
TR:141:476

Schmidgall, Tasso
Maintenance Dredging on the Arkansas River, WW76:Aug 76:459

Schmidt, Alfred E.
Dsc, with William J. Roa, Jr., CO3:Sept 76:570:12362, of "Fifty-Year History of Movable Bridge Construction - Part I", CO3:Sept 75:511:11565

Schmidt, E. J.
Scope of Socio-Economics Considerations, EFEEC:Aug 75:272

Schmidt, L. S.
Dsc, CE:Nov 76:36, on The Story of America's Transportation Revolution, CE:July 76:70

Schmidt, Lewis C.
Space Trusses with Brittle-Type Strut Buckling, with Peter R. Morgan and John A. Clarkson, ST7:July 76:1479:12274

Schmidt, O. John
Water Quality Management for Metropolitan Kansas City, EE6:Dec 75:935:11784
TR:141:518

Schmidt, Reuben E.
Gabions, Perforated Pipe and Gravel Serve as Fish Screens, with Kenneth R. McSwain, CE:May 76:73

Schmidt, Robert
Dsc, TN: EM6:Dec 76:1104:12584, of "Finite Deflection of Tapered Cantilevers", TN: EM3:June 76:549:12168

Schmidt, William
9000 psi Concrete — Why? Why not?, with Edward S. Hoffman, CE:May 75:52
Dsc: Walter H. Price, CE:Sept 75:30
Errata: CE:June 75:24
Clo: CE:Jan 76:29
TR:141:193

Schmit, Lucien A., Jr.
See J. Shamie, ST1:Jan 75:283:11075
See Juan H. Cassis, ST10:Oct 76:2053:12491

Schneider, Arland D.
Irrigation Tailwater Loss and Utilization Equations, TN: IR4:Dec 76:461:12592

Schneider, Jerry B.
Computer-Aided Design of Urban Transit Systems, with Claus D. Gehner, Dennis Porter and James Clark, TE4:Nov 74:943:10936
Errata: TE4:Nov 75:835:11673
TR:141:102

Schneider, William J.
Aspects of Hydrological Effects of Urbanization, HY5:May 75:449:11301
TR:141:320

Schnobrich, William C.
See Chang-Koon Choi, EM4:Aug 75:447:11504

Schodek, Daniel L.
Effect of Building Regulations on Built Environment, EI3:July 76:293:12261

Schofer, Joseph L.
See Pai-kang Wang, TE3:Aug 75:491:11492
See Brian P. Sterman, TE1:Feb 76:147:11930

Schofield, R. Bryan
Speed of Ships in Restricted Navigation Channels, WW2:May 74:133:10539
Dsc: Chesley J. Posey, WW2:May 75:220:11274
Clo: WW4:Nov 75:454:11677
TR:141:94

Schorn, Gerald
See Niels C. Lind, ST9:Sept 76:1741:12426

Schousboe, Ingvar
Bailey's Crossroads Collapse Reviewed, CO2:June 76:365:12186
Some Applications of Prestressing in Foundation Construction, CO2:June 75:403:11395
Dsc: George Tamaro, CO2:June 76:413:12160
TR:141:344

Schrader, Charles R.
Helicopter-Erected Tower Crane Demolishes Buildings, CE:May 75:60
TR:141:203

Schrader, Ernest K.
Deck Slab Repaired by Fibrous Concrete Overlay, with Anthony V. Munch, CO1:Mar 76:179:11976
Fibrous Concrete Repair of Cavitation Damage, with Anthony V. Munch, CO2:June 76:385:12198

Schreyer, Howard L.
See Thomas A. Duffey, ST7:July 76:1291:12230

Schroeder, Frederick J.
See Martin H. David, EE2:Apr 76:433:12045

Schroeder, Warren L.
Performance of a Cellular Sheetpile Wharf, with Dennis K. Marker and Thanasarn Khuayjarernpanishk, Preprint No.2731, Apr 76, 28pp.

Schroff, Dilip K.
See Niels C. Lind, ST1:Jan 75:67:11043

Schubel, J. R.
Suspended Sediment in Chesapeake Bay, OE75:June 75:245

Schuler, Victor J.
Improved Fish Protection at Intake Systems, with Lory E. Larson, EE6:Dec 75:897:11756
TR:141:495

Schultz, Richard L.
Introduction to Colonial Ports, Preprint No.2774, Sept 76, 6pp.

Schulz, Robert S.
Estimating Stock Water Use in Rural Water Systems, with T. Al Austin, HY1:Jan 76:15:11843

Schumm, Stanley A.
Geomorphic Thresholds: An Approach to River Management, with R. Michael Beathard, WW76:Aug 76:707
See Michael A. Stevens, WW2:May 75:119:11281
See Michael A. Stevens, WW76:Aug 76:1655

Schuster, Jack C.
Measuring Water Velocity by Ultrasonic Flowmeter, HY12:Dec 75:1503:11806
TR:141:489

Schuster, Reinhold M.
Composite Steel-Deck Concrete Floor Systems, ST5:May 76:899:12116

Schwartz, Paul H.
See William D. Ashton, GT7:July 74:787:10667

Schwartz, Sheldon A.
State Government Views of Licensing Energy Complexes, EFEEC:Aug 75:345

Schwarz, Harry E.
Trouble in Paradise, with Maria R. Eigerman, HY5: May 75:603:11296
TR:141:317
Water Resources Planning — Its Recent Evolution, Preprint No.2754, Sept 76, 18pp.

Schwarzwalder, James J.
See Dayle M. Clark, TE3:Aug 76:489:12290

Scordelis, Alexander C.
See Cheng-Shung Lin, ST3:Mar 75:523:11164
See Cheng-Shung Lin, CE:Oct 76:97

Scott, Barry A.
See Phoebe A. Miller, ST76:Aug 76:851

Scott, Randall
Land-Use and Growth Management—A Comment for Professionals, UP1:Aug 76:73:12359

Scott, Ronald F.
See Mohsen M. Baligh, GT11:Nov 75:1119:11706

Scottron, Victor E.
See J. D. Lin, WW76:Aug 76:1517

Scranton, Richard J.
See Robert E. Heightchew, Jr., CE:Oct 76:102

Seals, Roger K.
Present and Future Directions in Design Education, with William J. Wilhelm, EI1:Jan 75:37:11044
Dsc: C. Allen Wortley, EI1:Jan 75:46:11036
Clo: EI3:July 76:394:12223
TR:141:71

Sebastyan, G. Y.
The New Montreal International Airport, CO2:June 75:317:11346
TR:141:247

Seed, H. Bolton
Consideration of Finite Element Representation, STN75:Dec 75:II-246
Dsc: Paul C. Rizzo, STN75:Dec 75:II-269; John T. Christian, STN75:Dec 75:II-271; William F. Marcuson, III, STN75:Dec 75:II-271; Ramachandran Srinivasan, STN75:Dec 75:II-272
Clo: STN75:Dec 75:II-279
Dynamic Analysis of the Slide in the Lower San Fernando Dam during the Earthquake of February 9, 1971, with Izzat M. Idriss, Kenneth L. Lee and Faiz I. Makdisi, GT9:Sept 75:889:11541
Dsc: Richard L. Meehan, GT4:Apr 76:384:12013
TR:141:423
Evaluation of Soil Liquefaction Effects on Level Ground During Earthquakes, Preprint No.2752, Sept 76, 104pp.
Pore-Water Pressure Changes during Soil Liquefaction, with Philippe P. Martin and John Lysmer, GT4:Apr 76:323:12074
The Slides in the San Fernando Dams During the Earthquake of February 9, 1971, with Kenneth L. Lee, Izzat M. Idriss and Faiz I. Makdisi, GT7:July 75:651:11449
TR:141:365
Soil-Structure Interaction Analyses for Seismic Response, with John Lysmer and Richard N. Hwang, GT5:May 75:439:11318
Dsc: Asadour H. Hadjian, GT4:Apr 76:380:12013; John R. Hall, Jr., Jean F. Kissenpfennig and Paul C. Rizzo, GT6:June 76:650:12163
TR:141:300
Dsc, SDNPF:Dec 73:III-47, of "Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities", SDNPF:Dec 73:III-19
Dsc, SDNPF:Dec 73:III-100, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81
See E. D'Appolonia, SDNPF:Dec 73:III-19
See John D. Stevenson, SDNPF:Dec 73:III-81
See Robert M. Pyke, GT4:Apr 75:379:11251
See Geoffrey R. Martin, GT5:May 75:423:11284
See Robert T. Wong, GT6:June 75:571:11396
See Kenneth L. Lee, GT8:Aug 75:801:11527
See John Lysmer, STN75:Dec 75:II-125
See Pedro De Alba, GT9:Sept 76:909:12403

Seeley, Gerald R.
See Braja M. Das, OE75:June 75:434
See Braja M. Das, TN: GT3:Mar 76:282:11953
See Braja M. Das, TN: GT4:Apr 76:387:12019
See Braja M. Das, TN: GT9:Sept 76:1009:12367

Seemel, Richard N.
Plastic Filter Fabrics Have Bright Future, CE:Mar 76:57
See Gilles Bergevin, CE:Sept 76:60

Seginer, Ido
Wind, Sprinkler Patterns, and System Design, with Mordekhai Kostrinsky, IR4:Dec 75:251:11752
TR:141:505

Segur, Harvey
See Joseph L. Hammack, OE75:June 75:1247

Seide, Paul
Accuracy of Some Numerical Methods for Column Buckling, EM5:Oct 75:549:11607
Dsc: Krishnaiyengar Rajagopalan, EM5:Oct 76:937:12438; Mihai C. Tofan and Ioan A. Goia, EM5:Oct 76:938:12438
TR:141:361

Seidl, Ludwig H.
See Leonard Sugin, OE75:June 75:650

Seifert, Klaus
Water Quality Law in Federal Republic of Germany, with T. Clark Lyons, WR1:Apr 76:23:12071

Seigel, Lawrence G.
Performance Requirements for Fireproofing Materials, EM3:June 74:489:10598
Dsc: Sven Erik Magnusson and Ove Pettersson, EM3:June 75:282:11338
Clo: EM6:Dec 75:909:11742
TR:141:57

Seiki, Atsushi
Supertanker Fixed Berth in Open Ocean, with Yasumasha Shimada, CE:Apr 76:56
Dsc: John C. Mascenik, CE:Aug 76:33

Seim, Charles
"Construction and Design of Cable-Stayed Bridges," by Walter Podolny, Jr. and John B. Scalzi (Book Review), CE:Oct 76:34
The Seismic Design of the Dumbarton Bridge, Preprint No.2811, Sept 76, 25pp.

Seiple, W. Ray
New Approach to Site Selection Studies, PO1:July 74:63:10643
Dsc: James D. Calvert, PO1:July 75:137:11400
TR:141:229

Sejkora, Gary D.
See John L. Cleasby, EE4:Aug 75:503:11528

Seki, Arthur S.
See Patrick K. Takahashi, PO1:July 75:111:11455

Selig, Ernest T.
Relationship of Soil Moisture to the Dielectric Property, with Sundru Mansukhani, GT8:Aug 75:755:11517
TR:141:398

Selna, Michael W.
See Robert P. Miele, Preprint No.2724, Apr 76, 30pp.

Selzer, Seymour D.
Dsc, DOJ Puzzler, CE:June 76:31

Semprich, Stephen
See Walter Wittke, NMG:June 76:III-1385

Sen, Subir K.
See Phillip L. Gould, ST2:Feb 76:429:11927

Sen, Zekai
Wet and Dry Periods of Annual Flow Series, HY10: Oct 76:1503:12457

Senturk, Fuat
Non-Structural Flood Control in Rivers Flowing in Their Alluvions, WW76:Aug 76:1199
Recent Techniques in Water Diversion, WW76:Aug 76:1476
Dsc, HY3:Mar 76:436:11950, of "Resistance to Flows in Alluvial Channels", HY6:June 75:665: 11352

Sethness, E. Douglas, Jr.
Experience with the Offset Surfaces Breakwater, with Walter L. Moore and James E. Dailey, OE75:June 75:677

Sethuraman, Viswanatha
See Avittathur Achyuthan, HY4:Apr 75:417:11209

Sevuk, Ahmet Suha
See Ben Chie Yen, HY2:Feb 75:317:11088
See Ben Chie Yen, HY6:June 75:786:11340
See Ben Chie Yen, EE4:Aug 75:535:11503

Sexton, Harold Joseph
Dsc, ST6:June 76:1262:12166, of "Effects of Foundation Tipping on Dynamic Response", ST7: July 75:1297:11411

Seymour-Jones, Alfred A.
Dsc, GT1:Jan 75:81:11037, of "New Design Procedure for Stability of Soft Clays", GT7:July 74: 763:10664

Sfeir, A. A.
Dsc, EE5:Oct 75:868:11596, of "Boundary Layer Separation Concept of Settling Tanks", EE6:Dec 74:1213:11019

Shaaban, Ahmed
Design of Hipped Hypar Shells, with Milo S. Ketchum, ST11:Nov 76:2151:12543

Shabman, Leonard A.
Flood-Hazard Effects on Residential Property Values, with Demetrios I. Damianos, WR1:Apr 76:151: 12065
See Peter M. Ashton, WR1:Apr 76:89:12084

Shady, A. M.
See G. V. Eades, IR76:July 76:155

Shaff, S.
Dsc, SDNPF:Dec 73:III-100, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81

Shaffer, Marvin J.
See Richard W. Ribbens, IR76:July 76:545

Shah, Hemant H.
Seismic Analysis of Underground Structural Elements, with Shih-Lung Chu, PO1:July 74:53: 10648
Dsc: Munirathnam Valathur, PO1:July 75:137: 11400
TR:141:254

Shah, Jyotish A.
See Himat T. Solanki, ST9:Sept 76:1966:12366
See Himat T. Solanki, ST12:Dec 76:2389:12588

Shah, Kirit N.
See Marvin A. Larson, ST5:May 76:1031:12155

Shah, Surendra P.
See Ranga Palaniswamy, ST5:May 74:901:10547
See Antoine E. Naaman, ST8:Aug 76:1537:12313

Shah Alam, Abul B.
See David C. Colony, TE2:May 76:395:12148

Shahane, Ashok N.
Correlation Analysis of Hydrometeorological Data, with Daniel Thomas and Paul Bock, HY10:Oct 76: 1561:12484
Dsc, EE6:Dec 75:1036:11741, of "Modeling Sewage Treatment Plant Input BOD Data", EE1:Feb 75: 127:11132
Dsc, EI1:Jan 76:145:11815, of "Engineering of Public Systems", EI1:Jan 75:15:11068

Shahrabani, David M.
See John D. Ditmars, HY10:Oct 76:1605:12440

Shamie, J.
Frame Optimization Including Frequency Constraints, with Lucien A. Schmit, Jr., ST1:Jan 75:283:11075
TR:141:183

Shane, Joe M.
Reclamation of Wood-Chip Carrier Water, with Neil S. Hawthorne and Takashi Asano, EE2:Apr 75:215: 11231
TR:141:268

Shane, Miriam S.
See Robert E. Cannon, EE6:Dec 74:1205:11012

Shankar, N. Jothi
Influence of Tidal Inlets on Salinity in Estuaries, WW4:Nov 75:369:11692
TR:141:433
Dsc, WW1:Feb 76:105:11882, of "Computation of Flow through Masonboro Inlet, N.C.", WW1:Feb 75:93:11124
See Harihara Raman, WW1:Feb 76:99:11882
See Jade Dattatri, WW3:Aug 76:352:12284
See Jade Dattatri, WW3:Aug 76:363:12284

Shanklin, Donald W.
Emergency Protection for Flood Damaged Streams, IR76:July 76:85

Shapiro, Bertram
See Lawrence H. Lehman, CE:Oct 76:62

Shapiro, Daniel
Seismic Rehabilitation of Buildings With Special Importance, Preprint No.2787, Sept 76, 17pp.

Shapiro, Howard I.
Dsc, ST5:May 75:1158:11271, of "Post-Local-Buckling Behavior of Continuous Beams", ST6:June 74:1169:10595

Shapiro, Maurice A.
Dsc, EE2:Apr 75:277:11205, of "Recommendations for Environmental Engineering Education", EE2: Apr 74:243:10459

Shapiro, Michael
Dsc, with Jochen Kuhner, EE6:Dec 76:1299:12583, of "Land Use and Water Quality in New York Rivers", EE1:Feb 76:1:11902
See Jochen Kuhner, EE1:Feb 76:220:11876

Sharma, H. D.
Dsc, with Dharam V. Varshney, HY6:June 76:790: 12164, of "Resistance to Flows in Alluvial Channels", HY6:June 75:665:11352
Dsc, with Dharam V. Varshney, HY6:June 76:797: 12164, of "Stilling Basin Design for Low Froude Number", HY7:July 75:901:11448

Sharma, Hari R.
Air-Entrainment in High Head Gated Conduits, HY11:Nov 76:1629:12523

Sharma, Heramb D.
Generalisation of Sequential Nonlinear Analysis: A Study of Rockfill Dam with Joint Elements, with Gyan C. Nayak and J. B. Maheshwari, NMG:June 76:II-662

Sharma, Satish C.
Traffic Generation from Land Development Proposals, with Afifi H. Soliman, TE2:May 76:243: 12153

Sharma, Subodh C.
See Ganpat S. Pandit, TN: ST12:Dec 76:2360:12593

Sharon, S.
See Ilan Amir, IR76:July 76:192

Sharp, James J.
Dsc, HY1:Jan 75:205:11038, of "Transformation of Moody Diagram", HY6:June 74:797:10624

Sharp, Maurice L.
Aluminum Beam Webs Under Concentrated Loads, ST76:Aug 76:569

Sharpe, Ron
Dsc, ST1:Jan 76:300:11819, of "Free-Form Arch Dam Design System", ST4:Apr 75:795:11222

Shatto, Harry H.
See Bing C. Yen, OE75:June 75:504

Shaw, Donald E.
See Paul C. Rizzo, PO1:Jan 76:121:11858
See Satyananda Chakrabarti, NMG:June 76:I-551
See E. D'Appolonia, GT76:Aug 76:55

Shell, Gerald L.
See David Di Gregorio, EE5:Oct 76:1087:12474

Shen, Chih-Kang
Integrated Study of Reinforced Earth—II: Behavior and Design, with Karl M. Romstad and Leonard R. Herrmann, GT6:June 76:577:12210
See Karl M. Romstad, GT5:May 76:457:12144

Shen, Chung-Tung
Natural Frequencies of a Turbine Foundation, with Norman E. Stone, STN75:Dec 75:II-302

Shen, Hsieh W.
Hans A. Einstein's Contributions in Sedimentation, HY5:May 75:469:11290
Dsc: Elizabeth Roboz Einstein, HY1:Jan 76:112: 11817
TR:141:312
See Ruh-Ming Li, HY7:July 75:917:11460
See Hin Fatt Cheong, HY7:July 76:1035:12269
See Che S. Hung, HY12:Dec 76:1745:12639

Shen, Hung Tao
Computation of Seismic Induced Flow Landslide, with Wen Huang, NMG:June 76:II-1054
Transient Dispersion in Uniform Media Flow, HY6: June 76:707:12202
Dsc: Michael A. Collins, HY12:Dec 76:1791: 12586
Dsc, HY7:July 75:1031:11399, of "Urban Runoff by Linearized Subhydrographic Method", HY8:Aug 74:1141:10766
Dsc, with P. Rao Manam and Wen Huang, HY1:Jan 76:106:11817, of "Seismic Response of Reservoir-Dam Systems", HY3:Mar 75:403:11184

Shen, Thomas T.
Dsc, EE1:Feb 75:183:11085, of "NO_x Emissions from Stationary Combustion Sources", EE3:June 74:641:10581

Sherard, James L.
Identification and Nature of Dispersive Soils, with Lorn P. Dunnigan and Rey S. Decker, GT4:Apr 76: 287:12052
Pinhole Test for Identifying Dispersive Soils, with Lorn P. Dunnigan, Rey S. Decker and Edgar F. Steele, GT1:Jan 76:69:11846
Dsc, EM12:Dec 75:1299:11743, of "Pore and Eroding Fluid Influences on Surface Erosion on Soil", GT1:Jan 75:51:11078
Dsc, GT7:July 76:816:12224, of "Statistical Quality Control at Kastraki Earth Dam", GT9:Sept 75:837: 11552

Sherif, Mehmet A.
Dynamic Shear Moduli for Dry Sands, with Isao Ishibashi, GT11:Nov 76:1171:12572
See Isao Ishibashi, GT8:Aug 74:871:10752

Sherman, Donald R.
Circular Steel Tubes in Bending, Preprint No.2694, Apr 76, 27pp.
Latticed Structures: State-of-the-Art Report, ST11: Nov 76:2197:12581
Test of Circular Steel Tubes in Bending, ST11:Nov 76:2181:12568
A Viewpoint for the Traditional Approach to Structural Engineering Education, 1976

Sherman, Irving
Use of Abandoned Gravel Pits as Spreading Grounds — Experience in Los Angeles County, IR76:July 76:461

Sherman, James O.
See Thomas N. Keefer, HY4:Apr 76:538:12014

Sherrard, Joseph H.
Design and Operation Model of Activated Sludge, with Alonzo W. Lawrence, EE6:Dec 73:773:10220
Dsc: Ross E. McKinney, EE3:June 74:789:10564; Ralph E. Roper, Jr., Glen T. Daigger and C. P. Leslie Grady, Jr., EE4:Aug 74:1048:10693; F. Michael Saunders, EE6:Dec 74:1289:10971; Gerrit v.R. Marais, EE5:Oct 75:851:11596
TR:141:33
Dsc, EE4:Aug 76:876:12277, of "Design Graphs for Activated Sludge Process", EE5:Oct 75:829:11659

Sheu, Maw S.
See Colin E. Brown, GT2:Feb 75:147:11141

Sheydayi, Alex
Control of High Velocity Flow Into a Tidal Basin, WW76:Aug 76:999

Shi, Zin-Tsai
Determination of the Missile Load for Steel Columns of a Nuclear Power Plant Structure, STN75:Dec 75:II-29

Shiao, Larry S.
See Ruh-Ming Li, WW76:Aug 76:377

Shiau, Jong-Chiang
See William W. Durgin, WW1:Feb 75:59:11098

Shiba, Sadataka
Dynamic Response of Settling Basins, with Yoriteru Inoue, EE5:Oct 75:741:11609
Dsc: Peter A. Larsen, EE3:June 76:690:12161
Clo: EE6:Dec 76:1293:12583
TR:141:429
See Takeichiro Takamatsu, EE4:Aug 74:883:10705

Shibata, Akenori
Substitute-Structure Method for Seismic Design in R/C, with Mete A. Sozen, ST1:Jan 76:1:11824

Shibata, Toru
FE Analysis of Soil Movements Below a Test Embankment, with Masanari Tominaga and Hajime Matsuoka, NMG:June 76:II-599

Shideler, Gerald L.
See John C. Ludwick, WW4:Nov 75:357:11703

Shieh, William Y.J.
See Chang-hua Yeh, PO2:Nov 73:339:10141
See Chang-hua Yeh, ST1:Jan 76:301:11819

Shih, Chun-Yen
See Paul M. Berthouex, EE1:Feb 75:127:11132

Shih, Sun-Fu
Hydraulic Representation of Flow Cross Sections, with Robert L. Hamrick, TN: IR1:Mar 76:175: 11955

Shi-igai, Hiro
See Norbert L. Ackermann, WW76:Aug 76:348

Shimada, Yasumasha
See Atsushi Seiki, CE:Apr 76:56

Shimp, Steven
See George E. Mason, CO2:June 75:377:11377

Shimshi, Daniel
Simulation Model for Evapotranspiration of Wheat: Empirical Approach, with Dan Yaron, Eshel Bresler, Mordechai Weisbrod and Gad Strateener, IR1:Mar 75:1:11170
TR:141:320
See Gad Strateener, IR1:Mar 75:13:11169

Shinder, Allen E.
A Tool for Improving Social Service Delivery Systems in Urban Areas, with Martin L. Reiss, BP75:Dec 75:366

Shinozuka, Masanobu
Floating Plate under Wind Waves and Human Response, with H. M. Hwang and E. Makitani, Preprint No.2650, Apr 76, 30pp.
See Rimas Vaicaitis, ST3:Mar 75:585:11194
See Samad Zendehrouh, ST76:Aug 76:517

Shipton, Robert J.
Flow in Corrugated Pipes, with Harald R. Graze, HY9:Sept 76:1343:12414

Shipway, George D.
See Charles W. Roberts, PO1:Jan 76:113:11822

Shires, Patrick O.
See Richard L. Meehan, GT9:Sept 75:933:11590

Shofer, Joseph L.
See Abishai Polus, TE4:Nov 76:857:12570

Shofner, Gary N.
Cost Effectiveness Maintenance-Management Systems, TE2:May 76:331:12133

Shofner, George Edwin, Jr.
The Space Program's Contribution to Our Bicentennial, Preprint No.2772, Sept 76, 24pp.

Shook, James F.
See Matthew W. Witczak, TE2:May 75:297:11331

Shore, Sidney
See John L. Wilson, ST2:Feb 75:441:11089
See Rahmat Ollah Rabizadeh, ST9:Sept 75:1899: 11561
See John A. Lepore, Preprint No.2781, Sept 76, 30pp.

Shortreed, John H.
See John P. Braaksma, TE2:May 75:321:11308

Shuba, Peter J.
Bioassessment of the Standard Elutriate Test, with Joe H. Carroll and Henry E. Tatem, DIEE:Jan 76: 645

Shugar, Theodore A.
Development of Finite Element Head Injury Model, with Michael G. Katona, EM3:June 75:223:11367
TR:141:244

Shukla, N. B.
See Bellur S. Ramachandra Rao, EM1:Feb 76:19: 11920

Shull, Hollis
See A. S. Dylla, IR76:July 76:168

Shultz, David J.
See Doyle W. Stevens, EE4:Aug 76:869:12277

Shyam, Radhey
See Gyan C. Nayak, ST11:Nov 76:2247:12510

Sibley, T. H.
See J. J. Morgan, OE75:June 75:1332

Sicherman, Alan
See Wayne S. Smith, TE4:Nov 76:885:12511

Siddiqui, M. M.
See Tariq Masood, WW76:Aug 76:591

Siegel, Robert L.
See Bruce T. Caine, BP75:Dec 75:41

Sieger, Ronald B.
See David L. Eisenhauer, EE1:Feb 76:37:11906

Siegrist, Robert
Characteristics of Rural Household Wastewater., with Michael Witt and William C. Boyle, EE3:June 76: 533:12200

Siess, Alfred A., Jr.
Dsc, CE:July 75:30, on Interstate Highway System, CE:Mar 75:51

Sigvaldson, Oskar T.
Models for Scheduling Releases from Multireservoir Systems: A State-of-the-Art Review, IR76:July 76: 331

Silberman, Edward
Engineers and Public Participation in Water Resources Development, Preprint No.2668, Apr 76, 22pp.
Dsc, HY12:Dec 74:1859:10974, of "Winter-Regime Thermal Response of Heated Streams", HY4:Apr 74:531:10479
Dsc, EE4:Aug 75:685:11467, of "Boundary Layer Separation Concept of Settling Tanks", EE6:Dec 74:1213:11019

Silver, Marshall L.
Cyclic Triaxial Strength of Standard Test Sand, with Clarence K. Chan, Richard S. Ladd, Kenneth L. Lee, Drew A. Tiedemann, Frank C. Townsend, Julio E. Valera and James H. Wilson, GT5:May 76: 511:12145
Errata: GT10:Oct 76:1129:12439
Testing Procedure Effects on Dynamic Soil Behavior, with Ted K. Park, GT10:Oct 75:1061:11671
TR:141:490
Vibration Measurements of Steel Transit Structures, with Thomas Venema, ST9:Sept 75:1855:11557
TR:141:409
See Ted K. Park, GT6:June 75:513:11347
See Richard S. Ladd, GT8:Aug 75:827:11469
See Antoine E. Naaman, CO1:Mar 76:99:11986

Silver, Van A.
Predicting Deformation in the Fort Union Formation, with Samuel P. Clemence and Richard W. Stephenson, GT76:Aug 76:13

Silvester, Richard
Dsc, WW3:Aug 74:251:10699, of "Characteristics and Behavior of Pacific Coast Tidal Inlets", WW3: Aug 73:325:9927

Silveston, P. L.
Dsc, with J. F. Cordoba-Molina, EE4:Aug 75:672: 11467, of "Effects of Deposit Resuspension on Settling Basin", EE4:Aug 74:883:10705

Simaan, Amir
Diaphragm Braced Members and Design of Wall Studs, with Teoman B. Pekoz, ST1:Jan 76:77:11851

Simanton, J. Roger
See Kenneth G. Renard, IR3:Sept 75:242:11536

Simiu, Emil
Equivalent Static Wind Loads for Tall Building Design, ST4:Apr 76:719:12057
Errata: ST9:Sept 76:1967:12366
Mean Speed Profiles of Hurricane Winds, with V. C. Patel and John F. Nash, EM2:Apr 76:265:12044
Probability Distributions of Extreme Wind Speeds, with James J. Filliben, ST9:Sept 76:1861:12381
Wind Climate and Failure Risks, ST9:Sept 76:1703:12389
See James F. Costello, Preprint No.2739, Sept 76, 29pp.

Simmonds, Sidney H.
Yield-Line Design of Slabs, with Amin Ghali, ST1:Jan 76:109:11853
Dsc: William Hanuschak, ST9:Sept 76:1967:12366; Himat T. Solanki and Jyotish A. Shah, ST12:Dec 76:2389:12588
See A. Murray Lount, ST4:Apr 75:807:11242

Simmons, John E.L.
Effect of Separation Angle on Vortex Streets, EM5:Oct 75:649:11653
TR:141:444

Simmons, William P.
Research Benefits in Water Resources Construction, with William R. Groseclose, CO3:Sept 76:5277:12421

Simoes, Maria A.
See Fazal H. Chaudhry, TN: HY9:Sept 76:1387:12368

Simons, Daryl B.
"Sedimentation Engineering," Manual and Report on Engineering Practice No. 54, ed. by Vito A. Vanoni (Book Review), CE:Mar 76:34
See Michael A. Stevens, HY5:May 75:557:11334
See Michael A. Stevens, WW2:May 75:119:11281
See Paul H. Blinco, EM3:June 75:241:11372
See Peter F. Lagasse, DIEE:Jan 76:556
See Michael A. Stevens, HY5:May 76:637:12115
See James F. Ruff, WW2:May 76:189:12150
See Ruh-Ming Li, IR2:June 76:239:12196
See Ruh-Ming Li, HY8:Aug 76:1101:12304
See Purshottam Dass, WW76:Aug 76:1
See Ruh-Ming Li, WW76:Aug 76:377
See Peter F. Lagasse, WW76:Aug 76:434
See Everett V. Richardson, WW76:Aug 76:1285
See Ruh-Ming Li, WW76:Aug 76:1572
See Michael A. Stevens, WW76:Aug 76:1655

Simons, N. E.
Dsc, CO2:June 75:444:11336, of "Recent Results in French Research on Reinforced Earth", CO3:Sept 74:223:10800

Simpson, Bert
See Ronald M. Noble, PO1:July 75:85:11458

Sinclair, Benito A.
Affirmative Action Toward Equal Opportunity, CE:Feb 75:69
Dsc: Carroll N. LeTellier, CE:June 75:24
TR:141:81
Statement of Affirmative Action Principles, EI3:July 74:183:10688
Dsc: Raphael G. Kazmann, EI2:Apr 75:302:11206
Clo: EI1:Jan 76:144:11815
TR:141:38

Sinclair, Peter J.
See Vulli L. Gupta, TN: HY4:Apr 76:547:12018

Singaraj, Narasingam M.
Optimization in Trusses Using Optimal Control Theory, with Jawalker K. Sridhar Rao, ST5:May 75:1037:11304
TR:141:289

Singh, Anand K.
See James C. Anderson, EM2:Apr 76:275:12043

Singh, Gurcharan
Dsc, ST5:May 75:1155:11271, of "Composite Steel-Concrete Construction", ST5:May 74:1085:10561

Singh, Harcharan
See Joseph A. Fischer, OE75:June 75:1
See Joseph A. Fischer, PO1:July 75:1:11407

Singh, K. J.
See Ranbir S. Sandhu, NMG:June 76:1-104

Singh, Krishan P.
Agricultural Benefit Assessment from Flood Control, IR76:July 76:264

Singh, Mahendra P.
Generation of Seismic Floor Spectra, EM5:Oct 75:593:11651
TR:141:430
Gust Factors for Hyperbolic Cooling Towers, with Ajaya K. Gupta, ST2:Feb 76:371:11894
Statistical Aspects of Containment Tendon Surveillance, with Adolf Walser, PO1:July 75:23:11406
Dsc: James F. Costello, PO2:Nov 76:227:12509
TR:141:359

Singh, Pratap
Dsc, with Hernanda S. Chaudan, IR4:Dec 74:513:10975, of "Physical Model Study of Border-Strip Irrigation", IR4:Dec 73:493:10195

Singh, Shri N.
1976 Alfred Noble Prize Presented to Shri N. Singh, CE:Oct 76:104

Singh, Sita Ram
Numerical Solution of Boussinesq Equation, with C. M. Jacob, EM5:Oct 76:807:12463

Singh, Sukhmander
See Neville C. Donovan, Preprint No.2752, Sept 76, 30pp.

Singh, Verendra
Stresses in Soils due to Vertical Load on Piles, NMG:June 76:1-451

Singh, Vijay P.
Mathematical Aspects of Surface Runoff, WW76:Aug 76:773
Dsc, HY3:Mar 75:555:11148, of "Laboratory Experiments with Surface Runoff", HY4:Apr 74:501:10463

Sinha, Kumares C.
See Arun Chatterjee, TE2:May 75:265:11303
See Arun Chatterjee, TE3:Aug 75:505:11497
See Zuhair Abou-Loghd, TE2:May 76:347:12120

Sinha, Sitansu S.
See Anil K. Kar, PO1:July 75:95:11464

Sisodiya, Romy G.
See Amin Ghali, ST11:Nov 74:2307:10968

Sittner, Walter T.
Dsc, HY7:July 75:1034:11399, of "Simple Nonlinear Model for Flood Estimation", HY11:Nov 74:1507:10933

Siu, Wilfred W.C.
Practical Approach to Code Calibration, with Sree R. Parimi and Niels C. Lind, ST7:July 75:1469:11404
TR:141:322

See Mayasandra K. Ravindra, ST9:Sept 74:1789: 10779

Skaggs, R. Wayne
Drawdown Solutions for Simultaneous Drainage and ET, IR4:Dec 75:279:11804
TR:141:523
Saturated and Unsaturated Flow to Parallel Drains, with Yau-K. Tang, IR2:June 76:221:12199
Errata: IR3:Sept 76:399:12365

Skarecky, Rudolf
Yaw Effects on Galloping Instability, EM6:Dec 75: 739:11759
Dsc: Milos Novak, EM4:Aug 76:745:12278
TR:141:458

Skelly, Michael J.
See Thomas E. Pease, PO1:July 75:11:11408

Skermer, Nigel A.
Mica Dam Embankment Stress Analysis, GT3:Mar 75:229:11162
Dsc: Gunter Hardt, GT4:Apr 76:376:12013
Clo: GT11:Nov 76:1201:12507
TR:141:249

Skinner, D. H.
Dsc, ST3:Mar 76:685:11952, of "Effects of Elevated Temperature on Structural Members", ST7:July 75: 1531:11440

Skinner, Morris M.
See James F. Ruff, WW2:May 76:189:12150

Skinner, Robert E., Jr.
Airport Choice: An Empirical Study, TE4:Nov 76: 871:12554

Skogerboe, Gaylord V.
Irrigation Research to Practice in Grand Valley, with Wynn R. Walker and Robert G. Evans, IR76:July 76:19
Salinity Policy for Colorado River Basin, with Wynn R. Walker, HY8:Aug 75:1067:11510
TR:141:415

Skoglund, George R.
Evaluation of Resonant Column Test Devices, with William F. Marcuson, III and Robert W. Cunny, GT11:Nov 76:1147:12567

Skoglund, Timothy
See Heinz Stefan, EE6:Dec 76:1201:12619

Skop, Richard A.
Vortex-Excited Oscillations of Elastic Cylinders, with Owen M. Griffin, OE75:June 75:535

Skovgaard, Ove
Computation of Wave Heights Due to Refraction and Friction, with Ivar G. Jonsson and Jens Aa. Bertelsen, WW1:Feb 75:15:11100
Clo: WW1:Feb 76:100:11882
TR:141:246

Slawson, Guenton C., Jr.
Segmented Population Model of Primary Productivity, with Lorne G. Everett, EE1:Feb 76: 127:11945
Errata: EE6:Dec 76:1304:12583

Sleath, John F.A.
Velocities Above Rough Bed in Oscillatory Flow, WW4:Nov 74:287:10930
Errata: WW4:Nov 75:459:11677
TR:141:154

Sliepcevich, Cedomir M.
See Robert G. Rein, Jr., GT2:Feb 75:115:11134

Sloan, Robert L.
Port of San Francisco, Preprint No.2783, Sept 76, 26pp.

Sloane, Richard Lewis
Memoir of, TR:141:551

Slotta, Larry S.
Side Scan Sonar Views of Channel Disturbances Associated with Marine Traffic and Dredging, DIEE:Jan 76:226
See Tokuo Yamamoto, WW4:Nov 74:345:10944

Small, Mitchell J.
See William P. Darby, WR2:Nov 76:349:12571

Smerdon, Ernest T.
The University's Role in Research Implementation, IR76:July 76:11

Smith, Alexander D.
Vane Shear Strengths at Two High Rotation Rates, with Adrian F. Richards, OE75:June 75:421

Smith, Billy E.
Present and Future Trends in Harbor and Port Facilities, Preprint No.2814, Sept 76, 10pp.

Smith, Bob L.
Visual Quality Controls in Highway Design, TE3:Aug 75:479:11487
Dsc: Abishai Polus, TE3:Aug 76:601:12282
TR:141:307

Smith, Charles N.
See Robert E. Hickman, CE:Dec 76:68

Smith, Clifford D.
Hydraulic Design for an Outlet Structure, WW76: Aug 76:1019

Smith, Daniel J., Jr.
Repair of Earthquake Damaged Underground Reservoir, CO3:Sept 74:449:10825
Dsc: Norman B. Jones, CO2:June 75:449:11336
Clo: CO3:Sept 75:669:11533
TR:141:3
1976 Thomas Fitch Rowland Prize Presented to Daniel J. Smith, Jr., CE:Oct 76:100

Smith, Francis E.
Earthwork Volumes by Contour Method, CO1:Mar 76:131:11977
Dsc: Marvin Gates and Amerigo Scarpa, CO3: Sept 76:573:12362

Smith, George Edson Phillip
Memoir of, TR:141:552

Smith, Gerald M.
Seismic and Cyclonic Response of Continuous Frames, with George C. Ernst and Mahendra Maheshwari, ST2:Feb 74:391:10355
Dsc: Robert Park, ST1:Jan 75:331:11039
Clo: ST7:July 75:1606:11401
TR:141:23

Smith, Hanley K.
Habitat Development on Dredged Material, DIEE: Jan 76:856

Smith, I.
See J. M. Brannon, DIEE:Jan 76:455

Smith, Ian A.A.
See Peter L. Bransby, GT7:July 75:615:11447

Smith, Ian M.
Aspects of the Analysis of Gravity Offshore Structures, NMG:June 76:II-957
See P. George, NMG:June 76:I-419

Smith, J. C.
Dsc, ST3:Mar 76:682:11952, of "State-of-the-Art Report on Ultimate Strength of I-Beam Bridge Systems", ST5:May 75:1085:11323

Smith, Jimmy H.
See Herbert A. Mang, ST10:Oct 76:2033:12482

Smith, John J., Jr.
See Carmen F. Guarino, EE5:Oct 76:953:12473

Smith, John M.
Impact of Dredging on Water Quality in Grays Harbor, Washington, with James B. Phipps, Eugene B. Schermer and Don F. Samuelson, DIEE:Jan 76: 512

Smith, Jonathan E.
See Braja M. Das, TN: GT3:Mar 76:282:11953

Smith, Kenneth V.H.
See Anthony F.E. Zagni, HY2:Feb 76:207:11892
See Ahmed El-Khashab, HY9:Sept 76:1255:12402

Smith, Lawrence L.
See Martin P. Wanielista, EI3:July 75:321:11418

Smith, Maynard E.
Air Pollution Factors in the Planning of Energy Complexes, EFEEC:Aug 75:211

Smith, Peter J.
See George E. Hecker, HY1:Jan 76:108:11817

Smith, Peter M.
Spillway Modification to Reduce Gas Supersaturation, WW76:Aug 76:667

Smith, Phillip R.
See Abdul I.Y. Mohammed, HY7:July 75:885:11459

Smith, Raymond J.
Buckling of A Single-Crossarm Stayed Column, with George T. McCaffrey and John S. Ellis, ST1:Jan 75:249:11071
Dsc: Murray C. Temple, ST8:Aug 75:1724:11471
TR:141:180

Smith, Richard A.
Operation and Maintenance of Irrigation and Drainage Systems: Section IV — Maintenance, IR1: Mar 76:1:11963
Oxnard-Hueneme Pipeline, Operation and Water Quality Problems, Preprint No.2683, Apr 76, 8pp.

Smith, Richard Hult
Dsc, EE3:June 75:460:11337, of "Site Evaluation and Design of Seepage Fields", EE5:Oct 74:1133:10882

Smith, Robert R.
Acoustic Radiation of Submerged Vibrating Structures, with John T. Hunt, Preprint No.2711, Apr 76, 16pp.
See Roberta H. Ewald, EI2:Apr 75:175:11228

Smith, Roger E.
Dsc, IR1:Mar 75:73:11150, of "Subsurface Drainage Solutions by Galerkin's Method", IR1:Mar 74:1: 10397
Dsc, with Donald L. Chery, HY3:Mar 76:432:11950, of "Dynamic Behavior Model of Ephemeral Stream", HY5:May 75:511:11315

Smith, Stephen C.
See James D. Westfield, EE6:Dec 76:1297:12583

Smith, Stephen E.
Contractual Relationships in Construction, with Woodrow W. Wilson, William C. Burns and Robert A. Rubin, CO4:Dec 75:907:11776
TR:141:519

Smith, Wayne S.
Dsc, with Alan Sicherman and Ram Kulkarni, TE4: Nov 76:885:12511, of "Facility Location Example of Evaluation Methodology", TE4:Nov 75:817: 11727

Smith, William L.
Computer Location of Bikeways, with Jerry S. Murphy, BP75:Dec 75:66
Quantifying Impact of Transportation Systems, UP1: Mar 74:79:10416
Dsc: Peter M. Lima, UP2:Nov 74:205:10902
Clo: UP2:Nov 75:235:11676
TR:141:38

Smoots, Vernon A.
See William Enkeboll, Preprint No.2699, Apr 76, 24pp.

Sneddon, John
See Bruce W. Golley, SU2:Nov 74:115:10938

Snell, Cyril
See Martin J. Wyatt, TN: EM4:Aug 76:736:12286

Snell, Luke M.
Dsc, CO4:Dec 74:657:10970, of "Bridge Construction Surveying", CO2:June 74:105:10602

Snell, Robert R.
See Tsong-Miin Wang, ST9:Sept 75:1783:11540

Snethen, Donald R.
See Lawrence D. Johnson, GT2:Feb 75:213:11087

Snitbhan, Nimitchai
Finite Element Analysis of Large Deformation in Slopes, with Wai F. Chen, NMG:June 76:II-744
See Wai F. Chen, NMG:June 76:II-731

Snoeyink, Vernon L.
See Byung R. Kim, EE1:Feb 76:55:11937

Snyder, Matthew D.
See Paul C. Rizzo, PO1:Jan 76:121:11858

Sobey, Rodney J.
Jet-Forced Circulations in Water-Supply Reservoirs, with Stuart B. Savage, HY12:Dec 74:1809:11026
Dsc: Carlos V. Alonso, HY9:Sept 75:1295:11535; Kamil H.M. Ali and Terence S. Hedges, HY12: Dec 75:1543:11744
Clo: HY8:Aug 76:1137:12280
TR:141:176

Sokolov, M.
See Joram M. Amir, GT7:July 76:701:12256

Solanki, Himat T.
Helicoidal Girders, TN: ST4:Apr 76:869:12076
Dsc, EM5:Oct 74:1058:10837, of "Open-Channel Flow Equations Revisited", EM5:Oct 73:979:10073
Dsc, ST12:Dec 74:2529:10977, of "Torsional Strength of Prestressed Concrete Beams", ST5:May 74:881:10545
Dsc, ST2:Feb 75:443:11089, of "Skew and Elevated Support Effects on Curved Bridges", ST7:July 74: 1379:10670
Dsc, ST3:Mar 75:621:11151, of "Torsion-Bending-Shear Interaction for Concrete Beams", ST8:Aug 74:1657:10749
Dsc, with Joseph A. Valenti, HY4:Apr 75:434:11209, of "Comparison of Four Numerical Methods for Flood Routing", HY7:July 74:879:10659
Dsc, ST7:July 75:1623:11401, of "Collapse of Curved Reinforced Concrete Beams", ST11:Nov 74:2255: 10951
Dsc, with Joseph A. Valenti, HY8:Aug 75:1113: 11470, of "Hydrology of Porous Pavement Parking Lots", HY12:Dec 74:1739:11010
Dsc, ST11:Nov 75:2455:11675, of "Concrete L-Beams Subject to Combined Torsional Loads", ST1: Jan 75:269:11064
Dsc, ST11:Nov 75:2458:11675, of "Torsional Analysis of Perforated Core Structure", ST3:Mar 75:539:11167
Dsc, ST1:Jan 76:305:11819, of "Study of Three-Flight Free-Standing Staircases", ST7:July 75:1419: 11434

Dsc, with Jyotish A. Shah, ST9:Sept 76:1966:12366, of "Analysis of Reinforced Fibrous Concrete Beams", ST1:Jan 76:177:11847
Dsc, with Jyotish A. Shah, ST12:Dec 76:2389:12588, of "Yield-Line Design of Slabs", ST1:Jan 76:109:11853

Soliman, Afifi H.
See Satish C. Sharma, TE2:May 76:243:12153

Soliman, Mostafa M.
Flood Control Arrangements for River Junctions, WW76:Aug 76:1057

Somogyi, Frank
See Donald H. Gray, GT1:Jan 76:117:11816

Sonnen, Michael B.
Dsc, HY1:Jan 76:11817, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445

Sonnichsen, John C., Jr.
Makeup Requirements for Cooling Ponds, EE1:Feb 75:15:11114
TR:141:218

Soong, Hsiang Kuei
See J. D. Lin, WW76:Aug 76:1517

Soong, Tsu T.
See Charlesworth R. Martin, EM4:Aug 76:613:12321

Soriano, Antonio
Iterative Schemes for Slope Stability Analysis, NMG:June 76:II-713

Sovern, Douglas T.
See Kenneth R. Wright, EI4:Oct 76:447:12504

Sowers, George F.
Dewatering Rock for Construction, GT76:Aug 76:200
Failures in Limestones in Humid Subtropics, GT8:Aug 75:771:11521
Dsc: T. Cameron Kenney, GT3:Mar 76:268:11949; Federico J. Leon, GT10:Oct 76:1119:12439
TR:141:403
Dsc, GT4:Apr 75:405:11208, of "Review of Expansive Soils", GT6:June 74:667:10609
Dsc, GT6:June 76:653:12163, of "Sanitary Landfill Settlement Rates", GT5:May 75:475:11335

Sozen, Mete A.
See Shunsuke Otani, ST3:Mar 74:687:10435
See James K. Wight, ST5:May 75:1053:11311
See Akenori Shibata, ST1:Jan 76:1:11824

Spafford, A. G.
Dsc, with Charles D.D. Howard, HY9:Sept 75:1282:11535, of "Optimal Design for Highway Drainage Culverts", HY7:July 74:971:10676

Sparks, Donald
See Leonard Becker, WR1:Apr 76:101:12062

Speaker, John J.
See Harry E. Thomas, CE:Aug 75:66

Spector, Myron
See Rick R. Evans, Preprint No.2737, Sept 76, 25pp.

Speers, Douglas D.
Simulation of Future River Fluctuations, WW76:Aug 76:608

Speicher, Stephen J.
Beam Deflections by Numerical Integration, CE:Dec 75:67
Dsc: Eugene Chesson, Jr., CE:Mar 76:26

Spiegel, Zane
Dsc, IR1:Mar 76:171:11951, of "2020 Hindsight; Another Fifty Years of Irrigation?", IR2:June 75:87:11363

Spies, Henry R.
Automated Hydrography in the Philadelphia District, Preprint No.2764, Sept 76, 14pp.

Spies, Kenneth H.
See Milan Synak, EE3:June 75:301:11355

Spillers, William R.
Iterative Design for Optimal Geometry, ST7:July 75:1435:11439
TR:141:354

Spindel, J. E.
Dsc, ST12:Dec 76:2393:12588, of "Stress Cycles for Fatigue Design of Railroad Bridges", ST1:Jan 76:203:11857

Spitko, John E., Jr.
The Engineer's Response to Nonengineering Criticism of His Professional Work, EI1:Jan 75:1:11062
TR:141:91

Spivey, David A.
Construction Solid Waste, CO4:Dec 74:501:10993
Dsc: William B. Culham, CO2:June 75:451:11336
Clo: CO4:Dec 75:940:11740
TR:141:98

Spring, Bradford W.
Interaction of Plane Waves with a Row of Cylinders, with Peter L. Monkmeyer, OE75:June 75:979

Springfield, John
Design of Columns Subject to Biaxial Bending, Preprint No.2750, Sept 76, 21pp.

Sprinkel, Michael M.
Preassembled Steel Space Frame Bridge, with David Morris, TN: CO3:Sept 76:561:12371

Sproge, Ralph H.
Dsc, Greeheart Rejoinder, CE:Feb 76:30

Sridhar Rao, Jawalker K.
Dsc, EI3:July 76:395:12223, of "Issues and Problems in Urban Planning", EI3:July 75:305:11417
See Narasingam M. Singaraj, ST5:May 75:1037:11304

Srinath, Embar G.
Nitrifying Organism Concentration and Activity, with Raymond C. Loehr and Tata B.S. Prakasam, EE2:Apr 76:449:12041

Srinivasa-Iyer, L.
Durability Tests on Some Aggregates for Concrete, with Perry M. Rahn, Venkataswamy Ramakrishnan and James E. Russell, CO3:Sept 75:593:11574
TR:141:401

Srinivasan, C. N.
Dsc, ST9:Sept 75:1989:11537, of "Lateral Stability of Plane Open-Web Structures", ST11:Nov 74:2223:10924
Dsc, ST6:June 76:1289:12166, of "Inelastic Strength of Cold-Formed Steel Beams", ST11:Nov 75:2193:11713
Dsc, ST9:Sept 76:1961:12366, of "Minimum Cost Selection of One-Way Slab Thickness", ST12:Dec 75:2585:11785
Dsc, ST11:Nov 76:2251:12510, of "Window Glass Failures in Windstorms", ST1:Jan 76:147:11834

Srinivasan, R. S.
Stability of Generally Orthotropic Skew Plate, with S. V. Ramachandran, TN: EM3:June 76:569:12168

Srinivasan, Ramachandran
Dsc, STN75:Dec 75:II-272, of "Consideration of Finite Element Representation", STN75:Dec 75:II-246

Sriramulu, N.
Dsc, with S. V. Ranade and Malay Chaudhuri, EE2:Apr 75:271:11205, of "Determining Specific Deposit by Backwash Technique", EE2:Apr 74:353:10449

Stacey, Robert L.
See Allan S. Humpherys, IR2:June 75:95:11380

Stafford, Donald B.
Measuring Watershed Land-Use Changes with Airphotos, with James T. Ligon and M. Eugene Nettles, TE1:Feb 76:117:11925

Staggl, Heinz
See Ura G. Rieder, GT3:Mar 76:262:11949

Stahl, Bernhard
Offshore Platform Reliability — A Parameter Study, with K. A. Blenkarn, ST76:Aug 76:419

Stahl, David
Changes in the Private Sector, UP1:Aug 76:25:12352

Stahl, Lloyd E.
See Joseph A. Fischer, OE75:June 75:1
See Joseph T. DeAlteris, OE75:June 75:225

Staite, M. J.
See J. C. Day, IR76:July 76:445

Stall, John B.
See Chih Ted Yang, HY5:May 76:559:12103

Stallbohm, Heinrich
Dsc, with Ihsan Mungan and Phillip L. Gould, ASCE1:Jan 76:303:11819, of "Buckling of Cooling-Tower Shells: Bifurcation Results", ST6:June 75:1205:11365

Stallings, Eugene A.
Dsc, HY3:Mar 76:447:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445

Stamatopoulos, Aris C.
See Panaghiotis C. Kotzias, GT9:Sept 75:837:11552

Stamm, Gilbert G.
Water Supply for Energy Complexes in Water-Short Regions, with Kenneth O. Kauffman, EFEEC:Aug 75:147

Stangl, Edward W.
See John L. Cleasby, EE5:Oct 75:713:11642

Stansby, Peter K.
Base Pressure of Oscillating Circular Cylinders, EM4:Aug 76:591:12311

Starnes, James H.
See Bo O. Almroth, EM6:Dec 75:873:11811

Stastny, Francis J.
Pipeline Corridor Selection Model Concept, TE2:May 75:337:11330
TR:141:245

Stauffer, Daniel B.
Kingwood: A Non-Assisted Private Suburban Development, Preprint No.2656, Apr 76, 26pp.

Stea, William
See George S. Tseng, ST76:Aug 76:977

Steele, Charles R.
Membrane Solutions for Shells with Edge Constraint, EM3:June 74:497:10605
Dsc: Phillip L. Gould, EM1:Feb 75:88:11086
Clo: EM5:Oct 75:710:11598
TR:141:64
See Ganapathy V. Ranjan, EM4:Aug 76:643:12335

Steele, Edgar F.
See James L. Sherard, GT1:Jan 76:69:11846

Stefan, Heinz
River and Cooling Water Temperature Fluctuations, with V. Nguyen Chau, HY11:Nov 76:1613:12514
Temperature Dynamics in Dimictic Lakes, with Dennis E. Ford, HY1:Jan 75:97:11058
Dsc: Frank R. Schiebe, HY11:Nov 75:1456:11672
Clo: HY5:May 76:685:12092
TR:141:192
Wind Control of Algae Growth in Eutrophic Lakes, with Timothy Skoglund and Robert O. Megard, EE6:Dec 76:1201:12619

Steimle, Stephen E.
See Ben J. Haney, EE4:Aug 75:489:11511

Stein, Robert M.
See Vladimir Novotny, EE3:June 76:613:12191

Steinbach, Joav
Caisson Evaluation by Stress Wave Propagation Method, with Eben Vey, GT4:Apr 75:361:11245
TR:141:282

Steinberg, Meyer
See Austin H. Emery, CE:June 76:61

Steinbrugge, Karl V.
Meeting the Earthquake Challenge: California's New Laws, with Henry J. Degenkolb, CE:Feb 75:44
TR:141:48

Steiner, Ronald S.
Reinforced Earth Bridges Highway Sinkhole, with Edward J. Trojan, CE:July 75:54
TR:141:283

Steiner, Wesley E., Jr.
International Aspects of Irrigation and Drainage in the Yuma Area, IR76:July 76:558

Steitle, David Charles
See Benjamin Frank McCullough, TE2:May 75:345:11333

Stemwell, William I.
Dsc, Retired Engineer Registration, CE:July 76:32

Stensch, Walter
Free-Form Arch Dam Design System, with G. Gerry, ST4:Apr 75:795:11222
Dsc: Ron Sharpe, ST1:Jan 76:300:11819
Clo: ST8:Aug 76:1639:12281
TR:141:234

Stephens, Howard L.
See Tse-Yung P. Chang, ST11:Nov 75:2293:11704

Stephens, William E.
See John D. Bossler, SU1:Oct 75:115:11657

Stephenson, Richard W.
See Van A. Silver, GT76:Aug 76:13

Sterling, Wayne L.
See Wayne E. Boyet, WW76:Aug 76:127

Sterman, Brian P.
Factors Affecting Reliability of Urban Bus Services, with Joseph L. Schofer, TE1:Feb 76:147:11930

Stevens, Doyle W.
Dsc, with David J. Shultz and Ronald E. Rathbun, EE4:Aug 76:869:12277, of "Atmospheric Reaeration in a River Using Productivity Analysis", EE5:Oct 75:729:11644

Stevens, Glendon T., Jr.
Missouri River Computerized Data Bank, with Bob Pierce, WW76:Aug 76:725
Dsc, WW2:May 76:280:12095, of "Man-Induced Changes of Middle Mississippi River", WW2:May 75:119:11281

Stevens, John D.
Population Balance Use in Dilute Impurity Problems, with Paul M. Schierholz, EE2:Apr 76:337:12034

Stevens, Michael A.
A Geomorphic Study of Pool 25 in the Upper Mississippi River, with Stanley A. Schumm and Daryl B. Simons, WW76:Aug 76:1655
Man-Induced Changes of Middle Mississippi River, with Daryl B. Simons and Stanley A. Schumm, WW2:May 75:119:11281
Dsc: Gary R. Dyhouse, WW2:May 76:277:12095; Glendon T. Stevens, Jr., WW2:May 76:280:12095; Claude N. Strauser and Norbert C. Long, WW2:May 76:281:12095; Jerome A. Westphal and Paul R. Munger, WW2:May 76:283:12095
TR:141:285
Nonequilibriun River Form, with Daryl B. Simons and Everett V. Richardson, HY5:May 75:557:11334
Dsc: Rolf Kellerhals and Michael Church, HY1:Jan 76:115:11817; A. Rylands Thomas, HY4:Apr 76:532:12014
TR:141:332
Safety Factors for Riprap Protection, with Daryl B. Simons and Gary L. Lewis, HY5:May 76:637:12115
Dsc: Chesley J. Posey, HY12:Dec 76:1791:12586
See Ruh-Ming Li, IR2:June 76:239:12196
See Ruh-Ming Li, HY8:Aug 76:1101:12304

Stevenson, John D.
General Panel — Summary of Presentations, with E. J. Keith, Nathan M. Newmark, R. E. Keever, Jack E. Cermak, H. Bolton Seed and M. J. Holley, SDNPF:Dec 73:III-81
Dsc: Jack E. Cermak, SDNPF:Dec 73:III-99; W. Lou, SDNPF:Dec 73:III-99; Y. A. Patel, SDNPF:Dec 73:III-100; S. Shaff, SDNPF:Dec 73:III-100; H. Bolton Seed, SDNPF:Dec 73:III-100; Nathan M. Newmark, SDNPF:Dec 73:III-101; L. K. Liu, SDNPF:Dec 73:III-101; Oscar G. De Pineres, SDNPF:Dec 73:III-102; W. C. Hall, SDNPF:Dec 73:III-103; M. J. Holley, SDNPF:Dec 73:III-104; Richard A. Meyer, SDNPF:Dec 73:III-104; E. J. Keith, SDNPF:Dec 73:III-104; J. A. Korbonski, SDNPF:Dec 73:III-105; Shih-Lung Chu, SDNPF:Dec 73:III-105; W. Cho, SDNPF:Dec 73:III-106; R. Gupta, SDNPF:Dec 73:III-106; S. Warner, SDNPF:Dec 75:III-107; A. Anutti, SDNPF:Dec 73:III-107
Structural Design of Nuclear Plant Facilities, SDNPF:Dec 73

Stewart, B. A.
See M. H. Frere, Preprint No.2667, Apr 76, 24pp.

Stewart, J. Ian
Functions to Predict Optimal Irrigation Programs, with Robert M. Hagan and William O. Pruitt, IR2:June 74:179:10626
Dsc: Herbert G. Blank, IR1:Mar 75:75:11150
Clo: IR3:Sept 75:228:11536
TR:141:157

Stewart, K. H.
See M. Chandrashekar, HY4:Apr 75:341:11260

Stewart, William G.
See R. Richard Avent, ST9:Sept 75:1913:11564

Stille, Hakan
Analysis of a Test Embankment Considering the Anisotropy of the Soil, with A. Fredriksson and Bengt B. Broms, NMG:June 76:II-611
See Bengt B. Broms, GT3:Mar 76:235:12000

Stimpson, Wesley E.
Determining Bedrock Elevation by Acoustic Sounding Technique, with Gary S. Brierley and Thomas K. Liu, GT76:Aug 76:1

Stipp, John R.
Dsc, SU1:Dec 76:101:12589, of "Survey Program for Civil Works Projects", SU1:Oct 75:121:11662

Stokoe, Kenneth H., II
Dynamic Response of Embedded Machine Foundations, with Frank E. Richart, Jr., GT4:Apr 74:427:10499
Errata: GT7:July 75:693:11398
TR:141:33

Stoll, Robert D.
The Threshold of Dilation Under Cyclic Loading, with Lembit Kald, Preprint No.2752, Sept 76, 26pp.

Stoll, Ulrich W.
Dsc, GT6:June 76:660:12163, of "Torsional Response of Piles", GT10:Oct 75:1019:11629

Stoltenberg, David H.
Dsc, EE6:Dec 74:1285:10971, of "Sewage Chlorination Versus Toxicity -- A Dilemma?", EE6:Dec 73:761:10190

Stolzenbach, Keith D.
See E. Eric Adams, OE75:June 75:41

Stone, Norman E.
See Chung-Tung Shen, STN75:Dec 75:II-302

Stone, Ralph
Landfill Disposal of Liquid Sewage Sludge, EE1:Feb 75:91:11112
TR:141:5
Water Reclamation: Technology and Public Acceptance, EE3:June 76:581:12193
1976 Samuel A. Greeley Award Presented to Ralph Stone, CE:Oct 76:101

Stopher, Peter R.
See Arnim H. Meyburg, TE2:May 75:237:11299
See Arnim H. Meyburg, TE4:Nov 76:651:12531

Stoykovich, Milomir
See E. D'Appolonia, SDNPF:Dec 73:III-19

Strateener, Gad
Simulation Model for Evapotranspiration of Wheat: Effect of Evaporative Conditions, with Dan Yaron, Eshel Bresler and Daniel Shimshi, IR1:Mar 75:13:11169
TR:141:302
See Daniel Shimshi, IR1:Mar 75:1:11170

Strauser, Claude N.
Dsc, with Norbert C. Long, WW2:May 76:281:12095, of "Man-Induced Changes of Middle Mississippi River", WW2:May 75:119:11281

Streeter, Victor L.
See E. Benjamin Wylie, NMG:June 76:I-151
See E. Benjamin Wylie, NMG:June 76:II-938
See Chyr Pyng Liou, Preprint No.2752, Sept 76, 30pp.

Strelchuk, David L.
Multivariable Flood Level Frequency Distribution, HY12:Dec 76:1737:12637

Strelkoff, Theodor
See John G. Sakkas, HY2:Feb 76:171:11910

Streltsova, Tatiana D.
Drawdown in Compressible Unconfined Aquifer, HY11:Nov 74:1601:10950
Errata: HY9:Sept 75:1289:11535
TR:141:159

Strickler, M. Dee
Tension Proof Loading for Southern Pine Beams, with Roy F. Pellerin, ST3:Mar 76:645:11978

Stringham, Glen E.
Design of Irrigation Runoff Recovery Systems, with Safa N. Hamad, IR3:Sept 75:209:11569
Dsc: Ronald D. Bliesner, IR2:June 76:269:12165
Clo: IR4:Dec 76:471:12587
TR:141:452

Stripling, Travis
See James W. Ball, HY7:July 75:857:11442

Stroh, Dieter
Deformation of Deep Excavations, with Herbert Breth, NMG:June 76:II-686
Dsc: Robert D. Darragh and Surendra K. Saxena, NMG:June 76:III-1441
Dsc, GT8:Aug 75:833:11469, of "Performance of Tied-Back Walls in Clay", GT12:Dec 74:1259:11028

Stuart, Darwin G.
Evaluating Multi-Modal Alternatives: San Diego/Los Angeles Corridor Study, Preprint No.2666, Apr 76, 29pp.

Stuart, William A., II
Dsc, ASCE Annual Report Plaudit, CE:Apr 76:40

Stubbs, Norris
See Rene B. Testa, EM3:June 76:515:12212

Stukel, James J.
NO_x Emissions from Stationary Combustion Sources, EE3:June 74:641:10581
Dsc: Thomas T. Shen, EE1:Feb 75:183:11085
Clo: EE4:Aug 75:672:11467
TR:141:103
See Dennis D. Lane, EE3:June 76:571:12189

Sture, Stein
Stress Analysis of Strain-Softening Materials, with Hon-Yim Ko, NMG:June 76:I-580

Su, Chih-Lan
Dsc, EE4:Aug 76:867:12277, of "Some Features of Wind Action on Shallow Lakes", EE5:Oct 75:813:11640

Subrahmanyam, B. V.
Dsc, ST12:Dec 76:2381:12588, of "Minimum Cost Selection of One-Way Slab Thickness", ST12:Dec 75:2585:11785

Subramanian, Narayanan
Dsc, ST6:June 76:1284:12166, of "Design of Diaphragm-Braced I-Beams", ST10:Oct 75:2045:11615
Dsc, ST10:Oct 76:2095:12441, of "Nonlinear Analysis of Reticulated Space Trusses", ST12:Dec 75:2641:11799
Dsc, ST12:Dec 76:2397:12588, of "Optimization of Unstiffened Hybrid Beams", ST2:Feb 76:401:11907

Subramanya, Kanakatti
Studies on Seepage from Canals with Partial Lining, with Madhira Radha Madhav and Govinda Chandra Mishra, HY12:Dec 73:2333:10197
Dsc: Dasika Bhagavantam, HY12:Dec 74:1842:10974
Clo: HY8:Aug 75:1095:11470
TR:141:25

Sugin, Leonard
SEABERTH—A Program for the Calculation of Motions and Mooring Forces, with Ludwig H. Seidl, OE75:June 75:650

Suhoski, Joseph E.
See Harry H. West, ST11:Nov 75:2277:11712

Sulaiman, Ibrahim H.
Uplift Resistance of Piles in Sand, with Harry M. Coyle, TN: GT5:May 76:559:12127

Sullivan, Edward C.
Evaluating Air Pollution Impacts of Transportation, TE4:Nov 75:763:11721
TR:141:436

Sullivan, James T.
Transportation for the 1980's and Its Effect on Energy, the Economy and the Environment, Preprint No.2816, Sept 76, 4pp.

Sullivan, Richard H.
Dsc, HY3:Mar 76:448:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445

Sullivan, Robert
See Edward P. Larkin, EE1:Feb 76:29:11935

Suloway, Marshall
The Wrong Way is Sometimes the Right Way, Preprint No.2697, Apr 76, 18pp.
The Wrong Way Is Sometimes the Right Way, TE4:Nov 76:617:12518

Sumer, B. Mutlu
Dsc, HY6:June 76:806:12164, of "Solid Particle Settlement in Open-Channel Flow", HY7:July 75:917:11460

Summerfelt, Robert C.
See Glen E. Gebhart, EE6:Dec 76:1215:12608

Sumner, Billy T.
The Effect of Regulations on Productivity as Viewed by the Engineer, PROD:Aug 76:219

Sun, Chang-Kuei
Hybrid Techniques for Inelastic Dynamic Problems, ST4:Apr 75:889:11221
Dsc: Alain H. Peyrot, ST11:Nov 75:2459:11675
Clo: ST5:May 76:1164:12093
TR:141:230

Sun, Chang-Ning
A Direct Solution of Continuous Beams, CEE:Sept 76:97
Missile Penetration, with Edwin G. Burdette and Robert O. Barnett, TN: ST5:May 76:1141:12128

Sundar, Ananthakrishnan
Dsc, with H. F. Cheong, EE1:Feb 75:179:11085, of "Sewer Line Design Based on Critical Shear Stress", EE2:Apr 74:507:10480
Dsc, with Hiroshi Matsuo, HY3:Mar 75:554:11148, of "Sequential Deterministic Optimization in Reservoir Operation", HY3:Mar 74:443:10426
Dsc, EI2:Apr 75:299:11206, of "Building a Professionally Qualified Faculty", EI2:Apr 74:105:10466
Dsc, IR2:June 75:117:11341, of "Economic Pipe Sizing for Gravity Sprinkler Systems", IR2:June 74:107:10583
Dsc, with P. Paramasivam, CO3:Sept 75:668:11533, of "Conservation of Energy in Buildings", CO3:Sept 74:295:10795
See H. J. Thung, IR2:June 75:120:11341
See Rajathurai Ganeswaran, HY11:Nov 75:1453:11672
See Kee Kean Chin, HY3:Mar 76:426:11950

Surry, David
See Bjarni V. Tryggvason, ST12:Dec 76:2333:12630

Surti, Vasant H.
See Jende Hsu, TE3:Aug 76:451:12309
See K. C. Koutsopoulos, TE4:Nov 76:745:12566

Surya Kumar, G. V.
Dsc, ST10:Oct 75:2182:11601, of "Ferrocement—Material Behavior in Flexure", ST10:Oct 74:2053:10878

Suryoutomo, Herman
See Phillip L. Gould, ST2:Feb 76:429:11927

Sustar, John F.
Sediment-Water Interaction during Dredging Operations, with Thomas H. Wakeman and Richard M. Ecker, DIEE:Jan 76:736

Sutcliffe, Peter
See Peter H. John, HY8:Aug 76:1071:12308

Sutfin, Charles H.
See Michael J. Partridge, CE:Jan 75:68

Svec, Otto J.
Nonlinear Analysis of Rail Track and Support, with Gerald P. Raymond, NMG:June 76:I-540
Thick Plates on Elastic Foundations by Finite Elements, EM3:June 76:461:12215

Svensson, Torbjorn
See Klas Cederwall, HY7:July 76:935:12229

Sverdrup, Leif J.
Leif Sverdrup Dies at 77, CE:Feb 76:94

Swain, Abhimanyu
Diffusion and Mixing Processes of an Ocean (Abstract), with Harold D. Palmer and Kent T.S. Tzou, OE75:June 75:1436
Dsc, with Kent T.S. Tzou and Harold D. Palmer, HY7:July 75:1007:11399, of "Flow-Induced Forces on Protruding Walls", HY2:Feb 74:295:10347

Swamee, Prabhata K.
Explicit Equations for Pipe-Flow Problems, with Akalank K. Jain, HY5:May 76:657:12146
Dsc: Michael A. Collins, HY11:Nov 76:1707:12508

Swamee, Pramod K.
Equivalent Pipe Methods for Optimizing Water Networks--Facts and Fallacies, with P. Khanna, EE1:Feb 74:93:10375
Dsc: Arun K. Deb, EE6:Dec 74:1294:10971
Clo: EE5:Oct 76:1121:12436
TR:140:239

Swami, A. L.
Dsc, with A. K.M. Jilani, HY1:Jan 74:235:10251, of "Brink Depth for Trapezoidal Broad-Crested Weir", HY12:Dec 72:2171:9427

Swamy, Ramnath N.
Dsc, with C. V.S. Kameswara Rao, EM2:Apr 75:156:11207, of "Probabilistic Analysis of Fiber-Reinforced Concrete", EM2:Apr 74:397:10491

Swannell, Peter
See John L. Meek, TN: EM1:Feb 76:193:11884
See William Tranberg, ST3:Mar 76:659:11979

Swanson, R. Lawrence
Status of NOAA's Ocean Dumping Research in the New York Bight, Preprint No.2690, Apr 76, 30pp.

Swanson, William D.
See Ken P. Chong, ST9:Sept 76:1781:12411

Swartz, Stuart E.
Local Buckling of Long-Span Concrete Folded Plates, with Vernon H. Rosebraugh, ST10:Oct 76:1981:12455
Local Buckling of Long-Span Folded Plates, with Vernon H. Rosebraugh and Guang-Nan Fanjiang, ST5:May 75:1097:11298
TR:141:283

Swiger, William F.
See John T. Christian, GT11:Nov 75:1135:11701

Sycip, Amancio Z.
See Kenneth Y. Chen, DIEE:Jan 76:435
See Kenneth Y. Chen, WW4:Nov 76:443:12546

Sykes, Robert M.
Reforming Civil Engineering Education, CE:July 75:61
Dsc: John D. Grubbs, CE:Nov 75:28; Frederick G. Lehman, CE:Dec 75:30; Stuart G. Walesh, CE:Dec 75:30; H. V. Lamberti, CE:Dec 75:32
TR:141:292

Sylvestre, Gilbert
See Robert Lagace, IR76:July 76:229

Synak, Milan
Development of Oregon's Hazardous Waste Program, with Patrick H. Wicks and Kenneth H. Spies, EE3:June 75:301:11355
TR:141:300

Syrnick, Joseph R.
See Sidney Robin, CE:June 75:66

Szidarovsky, Ferenc
Levee System Reliability Along a Confluence Reach, with Lucien Duckstein and Istvan Bogardi, EM5:Oct 75:609:11621
TR:141:400

Szuladzinski, Gregory
Discrete Model of Beams on Elastic Foundation, EM6:Dec 75:839:11814
TR:141:519

Tadros, Gamil S.
See Amin Ghali, ST11:Nov 74:2307:10968

Tadros, Maher K.
See Walter H. Dilger, CE:Oct 76:97

Taggart, William C.
Dsc, with J. Craig Green, EE3:June 75:465:11337, of "Volume of Storm Water Retention Basins", EE5:Oct 74:1165:10889
See Kenneth R. Wright, CE:Nov 76:42

Tait, Richard G.
Rigid and Flexible Bracing Systems on Adjacent Sites, with Henry T. Taylor, CO2:June 75:365:11376
TR:141:282

Takahashi, Patrick K.
State-of-the-Art of Geothermal Reservoir Engineering, with Bill H. Chen, Ken I. Mashima and Arthur S. Seki, PO1:July 75:111:11455
Errata: PO2:Nov 76:229:12509
TR:141:508

Takamatsu, Takeichiro
Effects of Deposit Resuspension on Settling Basin, with Masaaki Naito, Sadataka Shiba and Yasuyo Ueda, EE4:Aug 74:883:10705
Dsc: P. L. Silveston and J. F. Cordoba-Molina, EE4:Aug 75:672:11467
Clo: EE1:Feb 76:213:11876
TR:141:116

Takanashi, K.
See Francois Cheong Siat Moy, ST6:June 75:1291:11342

Takeno, Masaru
See Rimas Vaicaitis, ST3:Mar 75:585:11194

Tam, William A.
See Subrata K. Chakrabarti, WW2:May 76:203:12140

Tamai, Nobuyuki
See Tanehiro Futagami, HY7:July 76:881:12244

Tamaro, George
Dsc, CO2:June 76:413:12160, of "Some Applications of Prestressing in Foundation Construction", CO2: June 75:403:11395

Tamburi, Alfred John
Regime Studies of the Lower Fraser, WW76:Aug 76: 1680

Tan, Conception
Session VI — Socio-Economic Problems, EFEEC: Aug 75:421

Tanaka, Tadatsugu
Finite Element Analysis of Miyama Rockfill Dam, with Ryoki Nakano, NMG:June 76:II-650

Tanal, Vahan
See James T. Dette, OE75:June 75:355

Tang, Frederick L.W.
See G. S. Liu, OE75:June 75:706

Tang, Man-Chung
Buckling of Cable-Stayed Girder Bridges, ST9:Sept 76:1675:12391
Stress Ribbon Bridge in Freiburg, Germany, CE:May 76:75
Dsc: Hal W. Hunt, CE:Sept 76:33
Clo: CE:Sept 76:33
See Chris S.C. Yiu, Preprint No.2785, Sept 76, 30pp.

Tang, Wilson H.
Optimal Risk-Based Design of Storm Sewer Networks, with Larry W. Mays and Ben Chie Yen, EE3:June 75:381:11360
TR:141:333
See Ben Chie Yen, TN: EE2:Apr 76:509:12016

Tang, Yau-K.
See R. Wayne Skaggs, IR2:June 76:221:12199

Tang, Yu-Kuang
See John E. Goldberg, ST4:Apr 75:821:11235

Tanniru, Venkata Narasimharao
Dsc, EM6:Dec 74:1259:10972, of "Cantilever Cylindrical Shells Under Assumed Wind Pressures", EM5:Oct 73:943:10085
Dsc, EM4:Aug 75:492:11468, of "Simplified Theory of Thin Cylindrical Shells", EM4:Aug 74:719:10720
Dsc, EM5:Oct 75:715:11598, of "Buckling of Cylindrical Shells by Wind Pressure", EM5:Oct 74: 1005:10874
Dsc, ST5:May 76:1151:12093, of "Displacements and Losses in Multistage Prestressed Members", ST11: Nov 74:2307:10968

Tanwani, Nanik
See Ganpat S. Pandit, ST3:Mar 75:613:11151

Tao, Pen-Chih
Seasonal and Nonseasonal ARMA Models in Hydrology, with Jacques W. Delleur, HY10:Oct 76: 1541:12477
See A. R. Rao, Preprint No.2663, Apr 76, 27pp.

Taoka, George T.
Ambient Response Analysis of Some Tall Structures, with Michael Hogan, Fazlur R. Khan and Robert H. Scanlan, ST1:Jan 75:49:11051
TR:141:159
Dynamic Properties of Tall Shear-Wall Buildings, with Augustine S. Furumoto and Arthur N.L. Chiu, ST2:Feb 74:305:10336
Dsc: Eugenio Pollner and Meshulam Groper, ST1:Jan 75:330:11039
Clo: ST8:Aug 75:1702:11471
TR:141:19
See Will Gersch, EM5:Oct 76:883:12464

Tapp, John S.
Wastewater Storage-Simulation of Instream Effects, EE6:Dec 76:1151:12601

Taranath, Bungale S.
Analysis of Interconnected Open Section Shear Wall Structures, ST11:Nov 75:2367:11736
TR:141:482

Tarapore, Zal S.
See Chintaman V. Gole, WW4:Nov 74:411:10903

Tarar, Riaz Nazir
Water Management in Indus River System, WW76: Aug 76:813
See Khalid Mahmood, WW76:Aug 76:1318

Tarkoy, Peter J.
Dsc, GT10:Oct 76:1122:12439, of "Importance of Groove Spacing in Tunnel Boring Machine Operations", GT9:Sept 75:949:11589

Tarr, Joel A.
Decisions About Wastewater Technology, 1800-1932, with Francis Clay McMichael, Preprint No.2792, Sept 76, 30pp.

Tarrer, Arthur R.
Optimal Activated Sludge Design under Uncertainty, with C. P. Leslie Grady, Jr., Henry C. Lim and Lowell B. Koppel, EE3:June 76:657:12207

Tatem, Henry E.
See Peter J. Shuba, DIEE:Jan 76:645

Tatinclaux, Jean-Claude
Hydraulic Modeling of Shallow Cooling Ponds, with Subhash C. Jain and William W. Sayre, PO1:July 75:43:11415
TR:141:462
See Aleksandar Nospal, TN: HY4:Apr 76:553:12018

Tatman, D. Russell
D.Russell Tatman Takes Office in Philadelphia, CE: Oct 76:93

Tatum, Clyde B.
See Hughes M.G. Nerses, CO2:June 75:391:11394

Tauchert, Theodore R.
Ritz Solutions for Thermoelastic Cylinders, EM5:Oct 76:825:12459

Tavares, Luis Valadares
Continuous Hydrological Time-Series Discretization, HY1:Jan 75:49:11063
TR:141:197

Tavenas, Francois A.
Dsc, GT75:June 75:II-263, of "In Situ Measurement of Initial Stress and Deformation Characteristics", GT75:June 75:II-181
Dsc, GT75:June 75:II-352, of "In Situ Measurement of Volume Change Characteristics", GT75:June 75: II-279

Tayfun, Mehmet Aziz
See Cheng Y. Yang, OE75:June 75:134

Taylor, Calvin W.
New Building Measures Needed in Order to Design for People, EFAN:Dec 74:47

Taylor, Donald C.
A Construction Industry R&D Incentives Program, with Joseph C. Kellogg and Michael C. Wilkinson, EI3:July 76:369:12271

Taylor, Henry T.
See Richard G. Tait, CO2:June 75:365:11376

Taylor, Peter W.
Dsc, with Warwick V. Clay, ST6:June 76:1266:12166, of "Earthquake Resistant Design of Intake-Outlet Towers", ST7:July 75:1349:11422

Tebedge, Negussie
Design Criteria for H-Columns under Biaxial Loading, with Wai F. Chen, ST3:Mar 74:579:10400
Dsc: Hossein Djalaly, ST1:Jan 75:345:11039
Clo: ST8:Aug 75:1705:11471
TR:141:30

Tedesko, Anton
Dsc, ST11:Nov 76:2238:12510, of "Some Esthetic Considerations in Steel Design", ST11:Nov 75:2257:11718

Teichman, Richard A., Jr.
See Noam Eimer, ST76:Aug 76:675

Teleki, Paul G.
Data Acquisition Methods for Coastal Currents, with F. R. Musialowski and D. A. Prins, OE75:June 75:1190
See Duncan Ross, OE75:June 75:1169

Temple, Murray C.
Dsc, ST8:Aug 75:1724:11471, of "Buckling of A Single-Crossarm Stayed Column", ST1:Jan 75:249:11071

Teng, T. C. Paul
Experimental Work for Active Clays in Mississippi, with M. Barrett Clisby, TE1:Feb 75:77:11105
TR:141:120

Tennyson, E. L.
The Future of Highways From the Mass Transit Viewpoint, Preprint No.2751, Sept 76, 17pp.

Terich, Thomas A.
See Paul D. Komar, WW1:Feb 76:13:11933

Testa, Rene B.
Concrete Failure Related to Constituent Properties, with Norris Stubbs, EM3:June 76:515:12212

Tettemer, John M.
Adapting Flood Control Projects for Environmental Compatibility, with Harold A. Vance, IR76:July 76:315

Tewksbury, Dennis L.
CYM—Synopsis, Comments, and Suggestions, CE:Nov 76:85

Tezcan, Semih S.
See H. Turan Durgunoglu, GT12:Dec 74:1303:10973

Thackwell, Henry L.
Dsc, TN: EE6:Dec 76:1304:12583, of "Septic Tank Efficiency", TN: EE2:Apr 76:505:12016

Thakkar, Manhar C.
Dsc, ST2:Feb 75:440:11089, of "Weight Optimization of Plane Trusses", ST5:May 74:865:10521
Dsc, ST10:Oct 76:2094:12441, of "Minimum Cost Selection of One-Way Slab Thickness", ST12:Dec 75:2585:11785

Thamm, Bernd R.
On Load Tests in Soft Clays, NMG:June 76:I-557

Thayer, William B.
See Tien H. Wu, GT9:Sept 75:913:11584

Thelen, Joseph F.
See Lev Zetlin, ST11:Nov 75:2241:11711

Theocaris, Pericles S.
See George J. Tsamasfyros, TN: EM5:Oct 76:927:12443

Theurer, Fred D.
Solution for Steady Open Channel Flow, with A. H. Barnes and Everett V. Richardson, WW76:Aug 76:793
Solution for Unsteady Open Channel Flow, with A. H. Barnes and Everett V. Richardson, WW76:Aug 76:1497

Thiel, Floyd I.
Use of Space in Highway Impact Zone, with Roger D. Mingo and Jo Ann Fields, TE4:Nov 76:727:12539

Thiers, Gerald R.
Foundation Treatment for Little Blue Run Dam, with Larry W. Lobdell and Bernard M. Mihalcin, GT76:Aug 76:283

Thigpen, Lewis
Projectile Penetration of Elastic-Plastic Earth Media, GT3:Mar 74:279:10414
Dsc: Dwain K. Butler and Robert S. Bernard, GT1:Jan 75:71:11037
Clo: GT7:July 75:692:11398
TR:141:18

Thom, Herbert C.S.
Extreme Wave Height Distributions Over Oceans, WW3:Aug 73:355:9939
Dsc: Subrata K. Chakrabarti, WW2:May 74:163:10509; Jade Dattatri, WW4:Nov 74:402:10903
Clo: WW3:Aug 75:297:11473
TR:141:35

Thoma, A. F.
Dsc, IR3:Sept 74:397:10771, of "Evaporation Reduction with Reflective Covers", IR3:Sept 73:353:9982

Thomas, A. Rylands
Dsc, HY3:Mar 75:553:11148, of "Factors Determining Bed Forms of Alluvial Streams", HY3:Mar 74:363:10396
Dsc, HY4:Apr 76:532:12014, of "Nonequilibriun River Form", HY5:May 75:557:11334

Thomas, Daniel
See Ashok N. Shahane, HY10:Oct 76:1561:12484

Thomas, Dean C.
Dsc, CE:Oct 75:32, on Short Span Bridges, CE:July 75:42

Thomas, Harry E.
Difficult Dam Problems - - Cofferdam Failure, with Eugene J. Miller and John J. Speaker, CE:Aug 75:66
TR:141:327

Thomas, I. A.
Northern Off-Road Transportation in the 70's, CO3:Sept 75:635:11573
TR:141:395

Thomas, Jimmie L.
Dsc, EI4:Oct 75, of "Social Science Emphasis in Engineering Education", EI4:Oct 75:509:11664

Thomas, Marlin U.
Dsc, EE6:Dec 74:1290:10971, of "Systems Analysis and Solid Waste Planning", EE1:Feb 74:7:10316

Thomas, Will A.
See Eduardo Aguado, HY7:July 74:869:10639

Thompson, Bruce
Future of Sanitary Landfill, with Iraj Zandi, EE1:Feb 75:41:11113
Dsc: Steven C. Macaulay, EE5:Oct 75:872:11596; John K. McDonald, EE5:Oct 75:873:11596
Clo: EE2:Apr 76:491:12010
TR:141:212

Thompson, Donald G.
Dsc, EE5:Oct 75:863:11596, of "Volume of Storm Water Retention Basins", EE5:Oct 74:1165:10889

Thompson, Erik G.
Finite Element Analysis of Layered Wood Systems, with James R. Goodman and M. Daniel Vanderbilt, ST12:Dec 75:2659:11802
Dsc: Gyan C. Nayak and Radhey Shyam, ST11: Nov 76:2247:12510
TR:141:515

Thompson, Lane
Dsc, TE3:Aug 76:603:12282, of "Bicycles and Traffic", TE4:Nov 75:753:11729

Thompson, Marshall R.
See John J. Allen, TE4:Nov 74:827:10911

Thompson, Morgan H.
Some Construction Aspects of Tarbela Dam, CO3: Sept 74:247:10799
Dsc: S. M. Saleem Moini, CO2:June 75:443: 11336
Clo: CO4:Dec 75:938:11740
TR:141:67

Thompson, Morris M.
Automation in Surveying and Mapping: Present and Future, Preprint No.2760, Sept 76, 17pp.
A Decade of Research in Surveying and Mapping, SU1:Oct 75:1:11626
Errata: SU1:Dec 76:99:12589
TR:141:141

Thoms, Robert L.
Numerical Analysis of Embankments over Soft Soils, with Richard A. Pecquet and Ara Arman, NMG: June 76:II-623

Thornes, John Barrie
Autogeometry of Semi-Arid Channel Systems, WW76:Aug 76:1715

Thornton, William A.
See James W. Gorzynski, ST4:Apr 75:973:11266

Thorson, Bruce M.
Frost Heaves — A Major Dilemma for Ice Arenas, with J. S. Braun, CE:Mar 75:62
Dsc: J. R. Dunkelberg, R. E. Ruma, T. J. Foss, D. E. Bruggers, R. B. Chenoweth and B. E. Davison, CE:Aug 75:32
Clo: CE:Aug 75:32
TR:141:100

Thresher, Robert W.
Anchor-Last Deployment Simulation by Lumped Masses, with John H. Nath, WW4:Nov 75:419: 11709
TR:141:496
Development of Analysis Techniques for Deployment, OE75:June 75:593

Thung, H. J.
Dsc, with Ananthakrishnan Sundar, IR2:June 75:120: 11341, of "Water Management Through Irrigation and Drainage: Progress, Problems, and Opportunities", IR2:June 74:153:10619

Thurow, Charles
Local Land Use Control Over Critical Areas, CE: Sept 75:73
Dsc: George R. Larson, CE:Mar 76:26
TR:141:350

Thurston, S.
See M. J.N. Priestley, ST6:June 76:1277:12166

Tickell, Ronald G.
Dsc, EM5:Oct 75:711:11598, of "Peak Distribution of Random Wave-Current Force", EM5:Oct 74: 873:10843
Dsc, WW4:Nov 76:489:12512, of "Statistics of Random Wave Field", WW4:Nov 75:435:11734

Tiedemann, Drew A.
See Marshall L. Silver, GT5:May 76:511:12145

Tieleman, Henry W.
See Timothy A. Reinhold, ST5:May 76:1003:12118
See Timothy A. Reinhold, ST9:Sept 76:1643:12372

Tierney, G. F.
See George K. Young, WR2:Nov 76:255:12559

Tierney, John T.
See Edward P. Larkin, EE1:Feb 76:29:11935

Tikhe, Madhav L.
Optimal Design of Chlorination Systems, EE5:Oct 76:1019:12487

Tillman, Donald C.
Clean Air Equals Dirty Water, with Robert C. Horii, EE1:Feb 75:87:11125
Dsc: Theopolis Holeman and Jack V. Matson, EE5:Oct 75:874:11596
TR:141:243

Timby, Elmer K.
Dsc, EI2:Apr 75:255:11268, of "Effectiveness of Present Operating Procedures and of the PAC Structure", EI2:Apr 75:247:11268

Timm, Leonard W.
See Wallace W. Sanders, Jr., ST7:July 76:1383:12247

Timmons, D. R.
See A. S. Dylla, IR76:July 76:168

Timmons, Edward W., Jr.
Responding to Our Members' Educational Needs, EI1:Jan 76:41:11869

Tingsanchali, Tawatchai
Effects of Overbank Flow in Flood Computations, with Norbert L. Ackermann, HY7:July 76:1013: 12266

Tippets, Ernest Franklin
Memoir of, TR:141:553

Tissington, Ian R.
See Barrington deV. Batchelor, ST12:Dec 76:2315: 12604

Tiyamani, Chinchai
See V. Seetharama Rao, WW76:Aug 76:421

Tocher, James L.
Specifications for Successful Programming Projects, ST76:Aug 76:837

Tofan, Mihai C.
Dsc, with Ioan A. Goia, EM5:Oct 76:938:12438, of "Accuracy of Some Numerical Methods for Column Buckling", EM5:Oct 75:549:11607

Tom, Edward C.K.
A Stability Study of a Concrete Arch Dam Rock Abutment, with Nestor T. Mirafuente and Efren Estrella, GT76:Aug 76:264

Tomasetti, Richard L.
Engineering the First Mass Transit Tramway, with David I. Ozerkis, CE:Nov 75:65
TR:141:455
See Paul A. Gossen, CE:Dec 76:46

Tominaga, Masanari
See Toru Shibata, NMG:June 76:II-599

Torno, Harry C.
Dsc, HY3:Mar 76:448:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75: 847:11445

Torstensson, Bengt-Arne
Pore Pressure Sounding Instrument, GT75:June 75:II-48
Dsc, GT75:June 75:II-48, of "Field Measurement of Permeability in Soil and Rock", GT75:June 75:II-3

Torum, Alf
See Hermann Moshagen, WW1:Feb 75:49:11099

Touma, Fadlo T.
Behavior of Bored Piles in Sand, with Lymon C. Reese, GT7:July 74:749:10651
Dsc: Eberhard Franke and Dieter Garbrecht, GT5:May 75:498:11269
Clo: GT11:Nov 75:1169:11674
TR:141:79
See Lymon C. Reese, GT5:May 76:493:12135

Tournier, Jean-Pierre
See Oscar Dascal, GT3:Mar 75:297:11193

Towner, Porter A.
An Outline of the Enforcement of Safety of Dams Statutes in California, EFRLD:Sept 75:87

Townsend, David R.
See Jan R. Prins, IR76:July 76:609

Townsend, Frank C.
See Marshall L. Silver, GT5:May 76:511:12145

Townsend, Ronald D.
Rapid Temperature Reduction of Thermal Discharge, with David L. Egar, HY5:May 75:529:11312
Dsc: Anand Prakash, HY3:Mar 76:430:11950
Clo: HY10:Oct 76:1599:12440
TR:141:323

Townsend, Steven A.
See Geraldine V. Cox, OE75:June 75:1314

Townsend, William H.
Dsc, ST1:Jan 75:355:11039, of "Simulated Earthquake Tests of R/C Frames", ST3:Mar 74:687:10435

Townson, John M.
Dsc, HY7:July 75:1014:11399, of "Numerical Model of St. Lawrence River Estuary", HY4:Apr 74:517:10472

Trahair, Nicholas S.
See Porpan Vacharajittiphan, ST3:Mar 74:547:10390
See Sritawat Kitipornchai, ST5:May 75:991:11295
See Porpan Vacharajittiphan, ST6:June 75:1223:11350
See Sritawat Kitipornchai, ST7:July 75:1333:11419
See Porpan Vacharajittiphan, ST7:July 75:1497:11430
See Scott T. Woolcock, EM4:Aug 75:301:11491
See Sritawat Kitipornchai, ST8:Aug 75:1661:11479
See David A. Nethercot, ST10:Oct 75:2045:11615
See Scott T. Woolcock, EM2:Apr 76:293:12054
See David A. Nethercot, ST4:Apr 76:701:12020

Train, Russell E.
Dsc, CE:Dec 75:40, on US Water Cleanup Program Speeds Up—But Still Much Red Tape, CE:Aug 75:71

Tranberg, William
Frame Collapse Using Tangent Stiffness, with Peter Swannell and John L. Meek, ST3:Mar 76:659:11979

Trapani, Robert J.
See Lawrence H. Lehman, TE4:Nov 75:781:11726
See Lawrence H. Lehman, CE:Oct 76:62

Trent, Roger B.
Public Acceptance of New Mass Transit System, with Cooper N. Redwine, UP1:Aug 76:225:12361

Trent, Roy E.
See George K. Young, Jr., HY7:July 74:971:10676

Trepal, Ralph F.
Fifty-Year Development: Construction of Steel Hybrid Bridges, CO4:Dec 75:719:11765
TR:141:474

Triandafilidis, George E.
See Raman Pichumani, TE2:May 74:293:10516

Trifunac, Mihailo D.
See Hung L. Wong, EM4:Aug 76:671:12328

Trojan, Edward J.
See Ronald S. Steiner, CE:July 75:54

Tryggvason, Bjarni V.
Predicting Wind-Induced Response in Hurricane Zones, with David Surry and Alan G. Davenport, ST12:Dec 76:2333:12630

Tsai, C.-F.
See John Lysmer, STN75:Dec 75:II-125

Tsai, Kuei-wu
See Carl W. Garbe, Preprint No.2678, Apr 76, 24pp.

Tsai, Nien-Chien
Dsc, PO2:Nov 73:434:10111, of "Interaction of Soil and Power Plants in Earthquakes", PO2:Oct 72:273:9242

Tsai, Yun-jui
See Yung-chi Chang, OE75:June 75:1046

Tsamasfyros, George J.
Prestressed Strip on Elastic Foundation, with Pericles S. Theocaris, TN: EM5:Oct 76:927:12443

Tschantz, Bruce A.
Review and Responsibility of State Dam Safety Programs, EFRLD:Sept 75:51

Tschebotarioff, Gregory P.
Half a Century of Soil Mechanics—Some Thoughts for the Future in the Light of the Past, EI3:July 76:321:12251
Tschebotarioff, Foundations Pioneer, Looks Back—and Ahead, CE:May 76:99

Tseng, George S.
Elastic and Elasto-Plastic Computerized Dynamic Analysis of Frame Structures Subjected to Blast Overpressure, with William Stea, Samuel Weissman, Norval Dobbs and Paul Price, ST76:Aug 76:977

Tso, Wai K.
See Jayanta K. Biswas, ST5:May 74:1019:10537
See Avigdor V. Rutenberg, ST3:Mar 75:539:11167
See Paul C.K. Chan, ST5:May 75:1021:11302

Tsui, Yuet
See G. Wayne Clough, GT12:Dec 74:1259:11028

Tucker, L. Scott
Dsc, HY3:Mar 76:449:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445
See William G. DeGroot, EE5:Oct 75:863:11596

Tucker, Richard C.
Forecasts and the Role of Alternative Futures, WR2:Nov 76:365:12578

Tufty, Harold
Value Engineering Made Mandatory on EPA Projects Over $10,000,000, CE:Sept 76:101

Tullis, J. Paul
See James W. Ball, HY7:July 75:857:11442

Tung, Chi C.
Effects of Surface Fluctuations on Wave Field Statistics, with Keikhosrow Pajouhi, Preprint No.2705, Apr 76, 17pp.
Influence of Wave-Current Interactions on Fluid Forces, Preprint No.2706, Apr 76, 12pp.
Peak Distribution of Random Wave-Current Force, EM5:Oct 74:873:10843
Dsc: Ronald G. Tickell, EM5:Oct 75:711:11598
Clo: EM3:June 76:575:12162

TR:141:88
Statistical Properties of Wave Force, EM1:Feb 75:1:11116
Errata: EM6:Dec 75:914:11742
TR:141:163
See Song S. Wu, OE75:June 75:849
See Keikhosrow Pajouhi, WW4:Nov 75:435:11734
See Kadir M. Kusmez, ST9:Sept 76:1725:12385

Turkstra, Carl J.
See Adel R.M. Fam, ST5:May 76:1097:12151

Turner, A. Keith
See Graham A. Jobling, IR4:Dec 73:493:10195

Turner, Billy G.
See Robert F. Holbrook, EE6:Dec 76:1263:12614

Turner, Darrell J.
Dsc, CE:May 76:32, on William D. Henderson: Man, Engineer, Priest Minister, CE:Mar 76:63

Turner, J. C.
The Effect of Regulations on Productivity, PROD: Aug 76:257

Turner, Thomas M.
Modern Trends in Dredge Design, DIEE:Jan 76:173

Turnock, Terry L.
Public Versus Client Interests - An Ethical Dilemma for the Engineer, EI1:Jan 75:61:11083
TR:141:147

Tuthill, Lewis H.
Dsc, CO2:June 76:411:12160, of "Recommended Standards for the Responsibility, Authority, and Behavior of the Inspector", CO2:June 75:359:11384

Tutos, Nicolai
See Daniel W. Halpin, CO2:June 76:335:12176

Twisdale, Lawrence A.
Multistage Optimization of Structures, with Narbey Khachaturian, ST5:May 75:1005:11297
Errata: ST3:Mar 76:680:11952
TR:141:279

Tzou, Kent T.S.
See Abhimanyu Swain, OE75:June 75:1436
See Abhimanyu Swain, HY7:July 75:1007:11399

Udaka, T.
See John Lysmer, STN75:Dec 75:II-125

Uddin, Tasnim
Effects of Elevated Temperature on Structural Members, with Charles G. Culver, ST7:July 75:1531:11440
Dsc: D. H. Skinner, ST3:Mar 76:685:11952; Wolfram Klingsch, ST6:June 76:1268:12166; Krishnaiyengar Rajagopalan, ST6:June 76:1269:12166; Sriramulu Vinnakota, ST6:June 76:1271:12166
Errata: ST11:Nov 75:2463:11675
Clo: ST12:Dec 76:2376:12588
TR:141:357

Ueda, Yasuyo
See Takeichiro Takamatsu, EE4:Aug 74:883:10705

Uiga, Ants
Let's Consider Land Treatment, Not Land Disposal, with Alfred T. Wallace and David H. Howells, CE: Mar 76:60

Ulery, Harry H., Jr.
See Yu Tang Chou, TE2:May 75:247:11307

Underwood, John R.
See Gerald R. Leake, TE2:May 76:215:12110

Unger, V. Ed
See John J. Jarvis, UP1:Aug 76:187:12353

Unluata, Umit
Effects of Entrance Loss on Harbor Oscillations, with Chiang C. Mei, WW2:May 75:161:11287
TR:141:312

Unny, Tharakkal E.
See Rammohan K. Ragade, WR2:Nov 76:297:12565

Uppal, Javed Yunas
Dsc, ST9:Sept 76:1956:12366, of "Post-Crushing Behavior of Unbound Concrete Beams", ST11:Nov 75:2303:11719

Ural, Oktay
Teaching Structural Analysis and Design Using Computers, Preprint No.2737, Sept 76, 8pp.

Urelius, Dwight E.
Behavior of Prestressed Cable Truss Structures, with David W. Fowler, ST8:Aug 74:1627:10747
Dsc: Edwin P. Foster and L. Bogue Sandberg, ST8:Aug 75:1710:11471
TR:141:75

Uriel, Santiago
Dsc, with Fernando Mier, GT6:June 75:596:11339, of "Behavior of Compacted Soil in Tension", GT9: Sept 74:1051:10828

Utku, Senol
Systematic Substructuring, ST4:Apr 75:717:11244
TR:141:258
See M. Salama, Preprint No.2737, Sept 76, 32pp.
See Yehia Bahel-El-Din, Preprint No.2737, Sept 76, 44pp.

U'u, Nguyen Van
See Arved J. Raudkivi, GT12:Dec 76:1225:12645

Uzan, Jacob
Analysis of Swelling-Soil Column Infiltration Test, TN: GT9:Sept 76:1014:12367

Uzuner, Mehmet S.
Theoretical Model of River Ice Jams, with John F. Kennedy, HY9:Sept 76:1365:12412

Vacharajittiphan, Porpan
Analysis of Lateral Buckling in Plane Frames, with Nicholas S. Trahair, ST7:July 75:1497:11430
TR:141:343
Flexural-Torsional Buckling of Curved Members, with Nicholas S. Trahair, ST6:June 75:1223:11350
TR:141:304
Warping and Distortion at I-Section Joints, with Nicholas S. Trahair, ST3:Mar 74:547:10390
Dsc: John D. Renton, ST1:Jan 75:341:11039; Morris Ojalvo, ST1:Jan 75:343:11039
Clo: ST8:Aug 75:1703:11471
TR:141:29

Vagneron, Jean-Marie J.
Evaluation of Three Stress-Strain Models for Soils, with Poul V. Lade and Kenneth L. Lee, NMG:June 76:III-1329

Vaicaitis, Rimas
Cross-Flow Response of Piles Due to Ocean Waves, EM1:Feb 76:121:11897
Nonlinear Panel Response to Nonstationary Wind Forces, EM4:Aug 75:333:11486
TR:141:272
Response Analysis of Tall Buildings to Wind Loadings, with Masanobu Shinozuka and Masaru Takeno, ST3:Mar 75:585:11194
TR:141:217

Vaidya, Nishikant R.
See Satyananda Chakrabarti, NMG:June 76:I-551

Vaish, Ashok K.
Earthquake Finite Element Analysis of Structure-Foundation Systems, with Anil K. Chopra, EM6: Dec 74:1101:10990

Dsc: Eduardo Kausel and Victor Chang-Liang, EM6:Dec 75:909:11742
Clo: EM5:Oct 76:933:12438
TR:141:136
See Harry W. Johnson, Preprint No.2700, Apr 76, 23pp.

Vajda, Michael
See Yerachmiel Argaman, EE5:Oct 75:703:11639

Valantine, Vernon E.
Significance of Water Quality to Water Resources, Preprint No.2673, Apr 76, 13pp.

Valathur, Munirathnam
Dsc, PO1:July 75:137:11400, of "Seismic Analysis of Underground Structural Elements", PO1:July 74:53:10648

Valenti, Joseph A.
See Himat T. Solanki, HY4:Apr 75:434:11209
See Himat T. Solanki, HY8:Aug 75:1113:11470

Valera, Julio E.
Comparison of Methods for Liquefaction Evaluation, with Neville C. Donovan, Preprint No.2752, Sept 76, 30pp.
Dsc, STN75:Dec 75:II-278, of "New Licensing Philosophy Concerning Soil Structure Interaction", STN75:Dec 75:II-238
See Marshall L. Silver, GT5:May 76:511:12145

Vallabhan, C. V. Girya
See Herbert A. Mang, ST10:Oct 76:2033:12482

Vallee, Robert P.
Dsc, GT10:Oct 74:1169:10838, of "Settlement of Building on Pile Foundation in Sand", GT3:Mar 74:265:10405

Valliappan, Palaniappan
See Leonard Domaschuk, GT7:July 75:601:11423

Valliappan, Somasundaram
Energy Absorbing Boundary for Anisotropic Material, with Weeks White and Ian K. Lee, NMG: June 76:II-1013
See Pravit Boonlualohr, EM6:Dec 76:995:12634

Van Beveren, James L.
Engineer's Role in Environmental Issues, EI2:Apr 76:169:12085
See Perry A. Maljian, CO3:Sept 74:337:10791

Vance, Harold A.
See John M. Tettemer, IR76:July 76:315

Vance, Ollie L.
Hanging Cable as Rotational Vibration Absorber, with James H. Woodward, TN: EM2:Apr 76:377:12017

Van Dalen, Karl
Shear Lag in Shallow Wide-Flanged Box Girders, with Sanivarapu V. Narasimham, ST10:Oct 76:1969:12449

van de Kreeke, Jacobus
Increasing the Mean Current in Coastal Channels, WW2:May 76:223:12157
Mass Transport and Mean Water Level, OE75:June 75:1266
Tide-Induced Mass Transport in Lagoons, with Robert G. Dean, WW4:Nov 75:393:11731
TR:141:515
Dsc, WW4:Nov 75:454:11677, of "Quadratic Loss and Scattering of Long Waves", WW3:Aug 74:217:10754

Vanderbilt, M. Daniel
See Erik G. Thompson, ST12:Dec 75:2659:11802

Vanderhoff, John W.
See Harshavardhan C. Mehta, TE1:Feb 75:1:11103
See Einar Dahl-Jorgensen, TE1:Feb 75:29:11101
See Harshavordhan C. Mehta, TE2:May 76:185:12102

Vanmarcke, Erik H.
See Rebecca Grant, GT9:Sept 74:973:10802
See Robert V. Whitman, ST5:May 75:1067:11309
See Ross B. Corotis, EM5:Oct 75:623:11648

Van Meer, Gretchen L.
Dsc, EE2:Apr 75:275:11205, of "Recommendations for Environmental Engineering Education", EE2:Apr 74:243:10459

Vannoy, Donald W.
Design of Building Floor Systems Subjected to Steady-State Dynamic Loads, with Furman W. Barton and Conrad P. Heins, ST76:Aug 76:720

Vanoni, Vito A.
Factors Determining Bed Forms of Alluvial Streams, HY3:Mar 74:363:10396
Dsc: Thomas Maddock, Jr., HY12:Dec 74:1855:10974; Ben Chie Yen, HY1:Jan 75:199:11038; A. Rylands Thomas, HY3:Mar 75:553:11148; Thomas Blench, HY4:Apr 75:412:11209
Clo: HY11:Nov 75:1435:11672
TR:141:42
1976 Karl Emil Hilgard Hydraulic Prize Presented to the Task Committee for Preparation of the Manual on Sedimentation, CE:Oct 76:103

van Os, Adriaan G.
See Karel L. Meijer, GT4:Apr 76:361:12021

van Schilfgaarde, Jan
Irrigation Management for Salt Control, with Leon Bernstein, James D. Rhoades and Stephen L. Rawlins, IR3:Sept 74:321:10822
Dsc: Lyman S. Willardson, IR2:June 75:122:11341; Edwin C. Olsen, IR2:June 75:123:11341; Jerald E. Christiansen, IR2:June 75:125:11341
Clo: IR4:Dec 76:467:12587
TR:140:452
Water Management Through Irrigation and Drainage: Progress, Problems, and Opportunities, IR2:June 74:153:10619
Dsc: Jerald E. Christiansen, IR2:June 75:117:11341; H. J. Thung and Ananthakrishnan Sundar, IR2:June 75:120:11341
Clo: IR4:Dec 75:316:11745
TR:141:137
See Petrus A.C. Raats, IR4:Dec 74:519:10975

Vanvari, Madanlal R.
See Vincent H. Chu, HY6:June 76:691:12205

Varadan, Tirupathi Kumara
See Gangan Prathap, TN: EM3:June 76:549:12168

Varadarajan, A.
See Yudhbir, GT3:Mar 75:315:11198

Vardy, Alan E.
Ventilated Approach Regions for Railway Tunnels, TE4:Nov 75:609:11691
TR:141:379

Varghese, P. C.
Lateral Stability of Plane Open-Web Structures, ST11:Nov 74:2223:10924
Dsc: C. N. Srinivasan, ST9:Sept 75:1989:11537
Errata: ST10:Oct 75:2184:11601
TR:141:109

Varlev, Ivan
Evaluation of Nonuniformity in Irrigation and Yield, IR1:Mar 76:149:12003

Varoglu, Erol
See W. D. Liam Finn, NMG:June 76:III-1465

Varshney, Dharam V.
Shear Distribution in Bends in Rectangular Channels, with Ramchandra J. Garde, HY8:Aug 75:1053: 11513
Dsc: Ben Chie Yen, HY5:May 76:688:12092; Werner Gotz, HY12:Dec 76:1771:12586
TR:141:418
See H. D. Sharma, HY6:June 76:790:12164
See H. D. Sharma, HY6:June 76:797:12164

Vasudevan, Ramaswami
See Gary C. Hart, ST1:Jan 75:11:11041

Veatch, Nathan Thomas
Memoir of, TR:141:537

Vecchioli, John
Wasterwater Reclamation and Recharge, Bay Park, N.Y., with James A. Oliva, Stephen E. Ragone and Henry F.H. Ku, EE2:Apr 75:201:11232
Errata: EE1:Feb 76:227:11876
TR:141:275

Veerling, John P.
1976 James Laurie Prize Presented to John P. Veerling, CE:Oct 76:103

Veletsos, Anestis S.
Seismic Interaction of Structures on Hysteretic Foundations, with V. V. Damodaran Nair, ST1:Jan 75:109:11046
TR:141:149

Vendhan, C. P.
See Mahadevan Hariharan, PO1:July 74:130:10636

Veneklasen, Wayne D.
Some Insights into the Behavioral Evaluation of Hospitals; Results of Three Studies, with Kevin E. Coray and Sue D. Pendell, EFAN:Dec 74:127
Summary for the Keynote Session I - The Quality System in Construction, EFAN:Dec 74:246

Venema, Thomas
See Marshall L. Silver, ST9:Sept 75:1855:11557

Venezia, Ronald A.
Air Quality Management through Land-Use Measures, UP1:Aug 76:95:12350

Veneziano, Daniele
Inductive Approaches to Structural Safety, EI1:Jan 76:81:11871

Venkatanarasaiah, Paruchuri
See Harihara Raman, WW3:Aug 75:299:11473
See Harihara Raman, WW3:Aug 76:301:12326

Venkobachar, C.
Dsc, with A. V.S. Prabhakara Rao and G. D. Agarwal, EE2:Apr 75:268:11205, of "Chlorine Disinfection of Low Temperature Waters", EE2: Apr 74:339:10443

Verdon, John
See J. Roger McHenry, WW76:Aug 76:1339

Verma, Vijay K.
See Martin A. Salmon, EM3:June 76:415:12206
See John W. Leonard, EM4:Aug 76:625:12333

Veronda, Daniel R.
Stability of Hyperboloidal Shells, with Victor I. Weingarten, ST7:July 75:1585:11446
Dsc: Victor Gioncu, ST7:July 76:1512:12226
TR:141:368
Stability of Pressurized Hyperboloidal Shells, with Victor I. Weingarten, EM5:Oct 75:663:11650
TR:141:423

Verruijt, Arnold
Non-Linear Elastic Approximations of the Behaviour of Soils, NMG:June 76:III-1321

Vey, Eben
See Joav Steinbach, GT4:Apr 75:361:11245

Vickers, Brian
See Peter L. Berry, GT8:Aug 75:741:11493

Vickrey, William
Dsc, TE2:May 75:395:11272, of "Two Means of Alleviating Rush-Hour Crowding", TE4:Nov 73: 845:10144

Victor, David J.
Ultimate Torque of Reinforced Concrete Beams, with Narayanan Lakshmanan and Narayanan Rajagopalan, ST7:July 76:1337:12249

Viest, Ivan M.
Composite Steel-Concrete Construction, ST5:May 74: 1085:10561
Dsc: Marvin A. Larson, ST12:Dec 74:2532:10977; Max L. Porter and Carl E. Ekberg, Jr., ST3:Mar 75:615:11151; Gilbert H. Beguin, ST3:Mar 75: 616:11151; Gurcharan Singh, ST5:May 75:1155: 11271; R. P. Johnson, ST5:May 75:1156:11271
Clo: ST12:Dec 75:2676:11746
TR:141:62

Viggiani, Carlo
See Pasquale De Simone, NMG:June 76:II-1067
See Aldo Evangelista, NMG:June 76:III-1367

Villeneuve, Jean-Pierre
See Hubert Demard, UP2:Nov 75:167:11679

Vinnakota, Sriramulu
Inelastic Spatial Stability of Restrained Beam-Columns, with Pentti Aysto, ST11:Nov 74:2235: 10919
Dsc: Henry R. Milner, ST9:Sept 75:1986:11537; V. Radhakrishna Murthy, ST9:Sept 75:1987: 11537; Sundaramoorthy Rajasekaran, ST9:Sept 75:1988:11537
Clo: ST6:June 76:1257:12166
TR:141:108
Dsc, ST4:Apr 76:862:12015, of "Buckling of Inelastic I-Beams under Moment Gradient", ST5:May 75: 991:11295
Dsc, ST6:June 76:1263:12166, of "Inelastic Buckling of Simply Supported Steel I-Beams", ST7:July 75: 1333:11419
Dsc, ST6:June 76:1271:12166, of "Effects of Elevated Temperature on Structural Members", ST7:July 75:1531:11440

Vir, Jayant
See Surendra K. Saxena, NMG:June 76:II-1082

Viraraghavan, Thiruvenkatachari
Septic Tank Efficiency, TN: EE2:Apr 76:505:12016
Dsc: Henry L. Thackwell, TN: EE6:Dec 76:1304: 12583
Dsc, EE2:Apr 75:274:11205, of "Recommendations for Environmental Engineering Education", EE2: Apr 74:243:10459
Dsc, EI3:July 75:437:11397, of "Building a Professionally Qualified Faculty", EI2:Apr 74:105: 10466

Virdi, Kuldeep S.
See Russell Q. Bridge, ST8:Aug 75:1716:11471

Viswanathan, M. N.
Dsc, ST7:July 75:1625:11401, of "Thermal Loading of Thin-Shell Concrete Cooling Towers", ST12:Dec 74:2367:11002
Dsc, TE3:Aug 75:593:11472, of "Automobile Energy Requirements", TE4:Nov 74:815:10909
Dsc, HY4:Apr 76:541:12014, of "Vertical Temperature Profiles in Open-Channel Flow", HY6:June 75:749:11389

Vitagliano, Vincent J.
The History of Computers — A Vendor's View, Preprint No.2759, Sept 76, 22pp.

Vogel, Herbert D.
Herbert D. Vogel Elected to Honorary Membership, CE:Oct 76:96

Volker, Raymond E.
Solutions for Unconfined Non-Darcy Seepage, IR1: Mar 75:53:11203
Dsc: Hannes Lacher, IR1:Mar 76:169:11951
Clo: IR4:Dec 76:470:12587
TR:141:362

Vondrick, Arthur F.
Municipal Problems with P.L. 92-500 — Conformance Versus Performance, Preprint No.2645, Apr 76, 15pp.

Vongvisessomjai, Suphat
Dsc, WW4:Nov 76:484:12512, of "Wave Forces on Bottom-Mounted Large-Diameter Cylinder", WW4: Nov 75:343:11699

Vonnegut, B.
Electrical Detection of Waves at Water-Air Surface, with R. Markson, OE75:June 75:1137

Von Thun, J. Lawrence
Auburn-Foresthill Bridge Abutment Slope Stability, with Bruce M. Moyes, GT76:Aug 76:333
Stability Analysis of Cut Slopes at Auburn Dam, GT76:Aug 76:349

Voorhees, Alan M.
Integrating Evaluation at the Project Scale, UP1:Aug 76:35:12351

Voreades, John G.
See Roberta H. Ewald, EI2:Apr 75:175:11228

Voutyras, Constantine
Dsc, HY8:Aug 75:1107:11470, of "Spillway Design for Series of Reservoirs", HY10:Oct 74:1329:10851

Vyas, Ravindra K.
Structural Economy of Certain Scalloped Shells, with Sang Ho Do, ST76:Aug 76:205

Vydra, Otto
County Treats Shredfill Leachate, with Alfred Grimm, CE:Dec 76:55

Waas, Gunter
See Eduardo Kausel, EM5:Oct 75:679:11652

Waddell, Joseph J.
Handling Concrete—Then and Now, CO4:Dec 75: 819:11779
TR:141:526

Waddell, Kidd M.
See Edward R. Holley, HY7:July 76:969:12250

Wade, Richard Louis
LOMARK: A Bidding Strategy, with Robert B. Harris, CO1:Mar 76:197:11961
Dsc: Marvin Gates, CO4:Dec 76:691:12582

Wadlin, George K.
Civil Engineering Curricula: Well-Rounded or Overweight?, EI2:Apr 76:159:12083

Waggoner, Eugene B.
What To Do When the Suit is Served, with John P. Bachner, CE:Apr 76:63

Waggy, W. Henry
See Donald L. Hey, Preprint No.2754, Sept 76, 16pp.

Wagner, A. L.
Ultimate Strength of Tubular Beam-Columns, with W. H. Mueller and Hacik Erzurumlu, Preprint No.2695, Apr 76, 25pp.

Wahler, William A.
Judgment in Dam Design, EFRLD:Sept 75:167

Wahls, Harvey E.
In Situ Measurement of Soil Properties, GT75:June 75

Wakabayashi, Minoru
Recent Japanese Developments in Mixed Structures, ST76:Aug 76:497

Wakeman, Thomas H.
Chemical Reactions During Disposal Operations, with Calvin C. Fong, Preprint No.2712, Apr 76, 18pp.
See John F. Sustar, DIEE:Jan 76:736

Wakhlu, Omkar N.
Dsc, HY10:Oct 74:1484:10839, of "Extreme Roughness of Natural River Channel", HY7:July 73:1027:9831

Walbridge, Edward W.
Multilane Passenger Conveyors, TE3:Aug 75:463: 11485
TR:141:298

Walbridge, S. Starr
1976 Frank M. Masters Transportation Engineering Award Presented to S. Starr Walbridge, CE:Oct 76: 103

Walesh, Stuart G.
Dsc, HY11:Nov 75:1447:11672, of "Urban Runoff by Linearized Subhydrographic Method", HY8:Aug 74:1141:10766
Dsc, CE:Dec 75:30, on Engineering Education: Can It be More Practical?, CE:July 75:60
Dsc, CE:Dec 75:30, on Reforming Civil Engineering Education, CE:July 75:61

Walker, Alvin J.
See David R. Lankard, TE1:Feb 75:137:11108

Walker, George R.
The Darwin Cyclone — Valuable Lesson in Structural Design, with Joseph E. Minor and Richard D. Marshall, CE:Dec 75:82
Dsc: Edward F. Diekmann, CE:Aug 76:28
TR:141:507

Walker, James R.
Breakwater Back Slope Stability, with Robert Q. Palmer and James W. Dunham, OE75:June 75:879

Walker, Leland J.
Effectiveness of Present Operating Procedures and of the PAC Structure, EI2:Apr 75:247:11268
Dsc: Myron D. Calkins, EI2:Apr 75:250:11268; Wendell E. Johnson, EI2:Apr 75:252:11268; Charles W. Yoder, EI2:Apr 75:253:11268; Elmer K. Timby, EI2:Apr 75:255:11268
TR:141:337
Walker's His Name, Management's His Game, CE: Oct 76:91
When the Going Gets Tough, the Tough Get Going, CE:Nov 76.65

Walker, R. D.
The Accelerated Deep Water Development System, with J. J. Zdeb, Preprint No.2677, Apr 76, 30pp.

Walker, William H.
See David J. Harman, ST3:Mar 75:567:11173

Walker, William R.
Private Constraints on Ground-Water Contamination, with William E. Cox, HY10:Oct 75:1333:11665
TR:141:464
Subsurface Environment—Private Property or Public Domain?, with William E. Cox, HY11:Nov 74: 1699:10958
Dsc: Frederick L. Hotes, HY10:Oct 75:1365: 11600

Clo: HY3:Mar 76:414:11950
TR:141:161
Water—An Element of Land-Use and Urban Growth Policies, with William E. Cox, UP1:Aug 76:81:12339
Water Rights and Water Quality Management, with William E. Cox, HY3:Mar 75:511:11156
TR:141:243
See William E. Cox, WW76:Aug 76:161

Walker, Wynn R.
See Gaylord V. Skogerboe, HY8:Aug 75:1067:11510
See Gaylord V. Skogerboe, IR76:July 76:19

Wallace, Alfred T.
See Ants Uiga, CE:Mar 76:60

Waller, Donald H.
Dsc, HY3:Mar 76:450:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445

Wallin, Lars
Dsc, Goliath Crane, CE:Aug 76:28

Wallis, Craig
See Charles P. Gerba, IR3:Sept 75:157:11572

Wallis, Ian G.
See Jon B. Hinwood, HY10:Oct 75:1315:11643
See Jon B. Hinwood, HY11:Nov 75:1405:11693

Wallner, Manfred
Finite Element Analysis of Grout Propagation, with Walter Wittke, NMG:June 76:II-1119

Walser, Adolf
See Mahendra P. Singh, PO1:July 75:23:11406
See Zdenek P. Bazant, ST10:Oct 75:2117:11632

Walsh, Michael R.
Dredged Material as a Natural Resource, Preprint No.2714, Apr 76, 19pp.

Walsh, Tom
British New Towns and the Civil Engineer, CE:Mar 75:84
TR:141:132

Walter, C. Edward
Practical Refuse Recycling, EE1:Feb 76:139:11941
Dsc: Dennis W. Weeter, EE5:Oct 76:1133:12436

Walters, Donald
Dsc, STN75:Dec 75:II-273, of "New Licensing Philosophy Concerning Soil Structure Interaction", STN75:Dec 75:II-238

Walters, Wallace H., Jr.
Mississippi River Regime Analysis, WW76:Aug 76:730

Walton, C. Michael
See R. B. Machemehl, TE4:Nov 75:681:11716

Walton, Matt S.
Urban Tunnels—An Option for the Transit Crisis, with Richard J. Proctor, TE4:Nov 76:715:12532

Wan, Tai-Yeu
Electro-Osmotic Consolidation of Soils, with James K. Mitchell, GT5:May 76:473:12156

Wanchoo, Maharaj K
Cracking Analysis of Reinforced Concrete Plates, with Gerald W. May, ST1:Jan 75:201:11059
TR:141:167

Wandmacher, Cornelius
Engineering Education for Engineering Practice, EI2:Apr 75:227:11250
TR:141:269
Metrication—SI in America, EI1:Jan 75:25:11073
TR:141:112

Wang, Chang-Yi
Parallel Flow Between Corrugated Plates, TN: EM6:Dec 76:1088:12591
Parallel Motion of Corrugated Plates, TN: EM2:Apr 76:373:12017

Wang, Chu-Kia
See Richard M. Gutkowski, ST3:Mar 76:629:12002
See Tarun R. Naik, ST76:Aug 76:644

Wang, E. C.
See R. Martin Czarnecki, Preprint No.2804, Sept 76, 28pp.

Wang, James T.S.
Buckling of Cantilever Bars on Elastic Foundations, TN: EM4:Aug 76:731:12286

Wang, John D.
Sensitivity of Estuarine Circulation Model, OE75:June 75:1035

Wang, Mian-Chang
Marine Sediment Pollution Study by Electric Conductivity Method, with David H. Killoy and Vito A. Nacci, Preprint No.2664, Apr 76, 19pp.
See Vito A. Nacci, OE75:June 75:380

Wang, Pai-kang
Population Change: An Indicator of Freeway Impact, with George L. Peterson and Joseph L. Schofer, TE3:Aug 75:491:11492
TR:141:324

Wang, Robert S.C.
See Phillip L. Gould, ST2:Feb 76:429:11927

Wang, Shen
Dynamic Effects of Ship Passage on Moored Vessels, WW3:Aug 75:247:11501
TR:141:380

Wang, Shien T.
Behavior of Cold-Rolled Stainless Steel Members, with Samuel J. Errera and George Winter, ST11:Nov 75:2337:11724
Dsc: David Allen, ST7:July 76:1523:12226
TR:141:478
Comparison of Boundary Integral Equation and FE Methods, with George E. Blandford, TN: ST9:Sept 76:1941:12370
Post-Local-Buckling Behavior of Continuous Beams, with Sheng S. Yeh, ST6:June 74:1169:10595
Dsc: Ken P. Chong, ST3:Mar 75:619:11151; Howard I. Shapiro, ST5:May 75:1158:11271
Clo: ST1:Jan 76:287:11819
TR:141:66
Survey of Current Research on Cold-Formed Structures, Preprint No.2807, Sept 76, 42pp.

Wang, Tsong-Miin
Strength of Beams with Eccentric Reinforced Holes, with Robert R. Snell and Peter B. Cooper, ST9:Sept 75:1783:11540
Errata: ST9:Sept 76:1952:12366
TR:141:386

Wang, Yuan S.
See Victor I. Weingarten, EM5:Oct 76:839:12492

Wang, Yung-shih
Buckling of Cylindrical Shells by Wind Pressure, with David P. Billington, EM5:Oct 74:1005:10874
Dsc: David J.F. Ewing, EM5:Oct 75:713:11598; Venkata Narasimharao Tanniru, EM5:Oct 75:715:11598
TR:141:122
Simplified Theory of Thin Cylindrical Shells, with Peter C.Y. Lee and David P. Billington, EM4:Aug 74:719:10720
Dsc: Venkata Narasimharao Tanniru, EM4:Aug 75:492:11468
TR:141:72

Wanielista, Martin P.
Environmental Impact Statements and Civil Engineering, with Waldron M. McLellon and Lawrence L. Smith, EI3:July 75:321:11418
TR:141:375

Ward, Jerry D.
Intercity Systems, Preprint No.2769, Sept 76, 17pp.

Ward, Michael A.
See Allen L. Mee, ST2:Feb 75:377:11121

Ward, Peter R.B.
Measurements of Estuary Dispersion Coefficients, TN: EE4:Aug 76:855:12285
Prediction of Mixing Lengths for River Flow Gaging, HY7:July 73:1069:9856
Dsc: John A. Cole, HY8:Aug 74:1167:10696; Shrikrishna V. Chitale and Kadambi S. Rajagopalan, HY10:Oct 74:1487:10839
Clo: HY7:July 75:1005:11399
TR:141:17
Transverse Dispersion in Oscillatory Channel Flow, HY6:June 74:755:10589
Dsc: Y. Lam Lau and B. G. Krishnappan, HY3: Mar 75:560:11148
Clo: HY9:Sept 75:1281:11535
TR:141:77
Dsc, with F. Koch, EE3:June 75:455:11337, of "DO-Sag in Oscillating Flow", EE4:Aug 74:837:10713

Ward, S. Daniel
Dsc, EE5:Oct 75:870:11596, of "Waste Generation Models for Solid Waste Collection", EE6:Dec 74: 1219:11022

Wardlaw, R. L.
See K. R. Cooper, ST76:Aug 76:286

Waring, George E.
George E. Waring: Man of Many Talents, CE:Apr 76:14
George Waring: Giving Sanitation Status, CE:July 76: 81

Warner, Charles W., Jr.
Water Recreation and Benefit Estimation for Lake Livingston (Texas), with Pat B. Fowler, G. E. Munger, Jr. and Jerry R. Rogers, Preprint No.2682, Apr 76, 16pp.

Warner, Don L.
Underground Liquid Waste Disposal, HY3:Mar 75: 421:11191
TR:141:274

Warner, James
Planning and Performing Compaction Grouting, with Douglas R. Brown, GT6:June 74:653:10606
Dsc: Robert Wade Brown, GT2:Feb 75:211: 11087; Adam C. Houlsby, GT4:Apr 75:403: 11208
Clo: GT11:Nov 75:1167:11674
TR:141:49
Ventura City Hall Restoration, CO1:Mar 76:119: 11970

Warner, S.
Dsc, SDNPF:Dec 75:III-107, of "General Panel — Summary of Presentations", SDNPF:Dec 73:III-81

Warren, Skip O.
"Construction Delay: Responsibility, Risks, and Litigation," by James J. O'Brien (Book Review), CE:Dec 76:30

Warszawski, Abraham
Integrated Contracting Systems, CO1:Mar 75:213: 11199
Dsc: G. S. Birrell, CO1:Mar 76:259:11948
Clo: CO4:Dec 76:689:12582
TR:141:235

Waslenchuk, Dennis G.
New Diver-Operated Bedload Sampler, HY6:June 76: 747:12179

Watanabe, Shighero
See Ben C. Gerwick, Jr., Preprint No.2729, Apr 76, 8pp.

Wathne, Magne
See Jon C. Liebman, EE3:June 75:399:11368

Watson, Ian
See Joseph A. Fischer, OE75:June 75:1

Watson, Sara Ruth
Civil Engineering History Gives Valuable Lessons, CE:May 75:48
Dsc: Herbert S. Saffir, CE:July 75:38; Harold K. Friedland, CE:Aug 75:113
TR:141:189
Some Historic Bridges of the United States, EI3:July 75:383:11425
TR:141:395

Watt, W. Edgar
QUURM — Implications for the Design of Urban Drainage Systems, with Kenneth C. Wilson and Joan E. Eaton, IR76:July 76:580

Watters, Gary Z.
Water Hammer in PVC and Reinforced Plastic Pipe, with Roland W. Jeppson and Gordon H. Flammer, HY7:July 76:831:12236

Watts, George M.
See Adrian J. Combe, III, DIEE:Jan 76:719

Waugh, Richard G., Jr.
Canal Development in Early America, Preprint No.2774, Sept 76, 30pp.
Evaluating Costs for Port Distribution Systems, WW4:Nov 75:385:11723
TR:141:506

Way, Charles R.
Dsc, CE:May 75:21, on Pocket Calculators Take Hold in Civil Engineering, CE:Feb 75:39

Weare, T. John
Instability in Tidal Flow Computational Schemes, HY5:May 76:569:12100
Dsc: Michael B. Abbott, HY12:Dec 76:1787: 12586

Weaver, Graeme D.
See Eugene L. Marquis, TE1:Feb 76:61:11922

Webb, David H.
Legislative Impact of P.L. 92-500 on Dredging, with Alfred P. Holmes, Jr., DIEE:Jan 76:83

Webb, R. P.
Spatial Data Analysis of Nonstructural Measures, with M. W. Burnham, WW76:Aug 76:329

Webb, Ralph D.
Past 50-Year Development of Constructional Steels, with John A. Gilligan and Roland M. Brown, CO4: Dec 75:785:11753
Errata: CO4:Dec 76:691:12582
TR:141:448

Weber, Eugene W.
Water Planning — An Overview, Preprint No.2754, Sept 76, 8pp.

Weber, Harold E.
Dsc, Society Policy and the Nuclear Initiative, CE: Dec 76:28

Weber, William G., Jr.
Sediment Runoff During Highway Construction, with Lloyd A. Reed, CE:Mar 76:76

Webster, John T.
Dsc, TE1:Feb 75:176:11090, of "Incorporating Highway Safety into Level of Service", TE2:May 74:417:10557

Wechsler, Barry A.
See David R. Cogley, DIEE:Jan 76:964

Weeter, Dennis W.
Analysis of Regional Waste Treatment Systems, with James G. Belardi, TN: EE1:Feb 76:233:11883
Dsc, EE5:Oct 76:1133:12436, of "Practical Refuse Recycling", EE1:Feb 76:139:11941
See Thomas E. Wester, Preprint No.2653, Apr 76, 29pp.

Wegmuller, Anton W.
Design of Large Papermachine Mat Foundation, with James H. Woodward and John R. Bayliss, ST1:Jan 76:231:11863
Full Range Analysis of Eccentrically Stiffened Plates, ST1:Jan 74:143:10286
Dsc: William S. Peterson, Celal N. Kostem and John M. Kulicki, ST9:Sept 74:1980:10772
Clo: ST7:July 75:1606:11401
TR:141:16

Weingarten, Victor I.
Stability of Shells Attached to An Elastic Core, with Yuan S. Wang, EM5:Oct 76:839:12492
See Daniel R. Veronda, ST7:July 75:1585:11446
See Daniel R. Veronda, EM5:Oct 75:663:11650

Weisbrod, Mordechai
See Daniel Shimshi, IR1:Mar 75:1:11170

Weisman, Richard N.
Comparison of Warm Water Evaporation Equations, HY10:Oct 75:1303:11620
Errata: HY9:Sept 76:1404:12364
TR:141:459

Weissman, Samuel
See George S. Tseng, ST76:Aug 76:977

Welch, Robert C.
See Lymon C. Reese, GT7:July 75:633:11456

Weller, James A.
Dsc, HY11:Nov 75:1449:11672, of "Similitude in Free-Surface Vortex Formations", HY11:Nov 74:1565:10941

Wells, Donald R.
Polyethylene Pipe Solutions to Sewer Outfalls, CE:Sept 76:62

Wen, Yi-Kwei
Approximate Method for Nonlinear Random Vibration, EM4:Aug 75:389:11500
TR:141:295
Dynamic Tornadic Wind Loads on Tall Buildings, ST1:Jan 75:169:11045
Dsc: Julian C.R. Hunt, ST11:Nov 75:2446:11675
Clo: ST5:May 76:1160:12093
TR:141:147
Method for Random Vibration of Hysteretic Systems, EM2:Apr 76:249:12073

Wengenroth, Reece H.
Fifty-Year History of Movable Bridge Construction—Part III, with Howard A. Mix and Egbert R. Hardesty, CO3:Sept 75:545:11555
TR:141:367

Wenzel, Harry G., Jr.
Detention Storage Control Strategy Development, with John W. Labadie and Neil S. Grigg, WR1:Apr 76:117:12070
Meter for Sewer Flow Measurement, HY1:Jan 75:115:11070
TR:141:203
See Larry W. Mays, WR2:Nov 76:385:12580

Wenzel, Thomas H.
See Raymond J. Krizek, ST76:Aug 76:607

Werner, Stuart D.
Dsc, with John R. Hall, Jr., PO1:July 74:127:10636, of "Interaction of Soil and Power Plants in Earthquakes", PO2:Oct 72:273:9242

Werner, William Murray
Memoir of, TR:141:554

West, Harry H.
Natural Vibrations of Suspension Cables, with Louis F. Geschwindner and Joseph E. Suhoski, ST11:Nov 75:2277:11712
Dsc: H. Max Irvine, ST6:June 76:1286:12166; Steven E. Ramberg, ST9:Sept 76:1954:12366
TR:141:463

West, Robert C.
Salary Guidelines, EI2:Apr 75:287:11212
TR:141:184

Wester, Ben C.
See Santosh R. Goswami, EE6:Dec 76:1307:12583

Wester, Thomas E.
Utility Land Corridors Location Model — Environmental Assessment, with Dennis W. Weeter, Preprint No.2653, Apr 76, 29pp.
Dsc, EE6:Dec 76:1312:12583, of "Discounted Cash Flow Analysis to Select Equipment", EE3:June 76:595:12190

Westergaard, Barbara
See Robert Gutman, EFAN:Dec 74:14

Westfield, James D.
Dsc, with Stephen C. Smith, EE6:Dec 76:1297:12583, of "Performance of Single Household Treatment Units", EE1:Feb 76:175:11895

Westneat, Arthur S.
Remote Classification of Marine Sediments, DIEE:Jan 76:289

Westphal, Jerome A.
Mississippi River Dikes and Stage-Discharge Relations, with Paul R. Munger and Clifford D. Muir, WW76:Aug 76:1383
Dsc, with Paul R. Munger, WW2:May 76:283:12095, of "Man-Induced Changes of Middle Mississippi River", WW2:May 75:119:11281

Weverka, Lloyd J.
LNG Terminals, with Charles J. Lord, OE75:June 75:732

Weyermuller, Richard G.
Flow at Grade-Break from Mild to Steep Slopes, with M. Gamal Mostafa, HY10:Oct 76:1439:12458

Weyers, Richard E.
See Paul R. Blankenhorn, TE1:Feb 75:65:11102

Wheeler, Walter L.
State-of-the-Art of Ballastless Track at-Grade, TE1:Feb 76:131:11929

Wheen, Robert J.
Steel Stress-Ribbon Concept — Will It Save Money?, CE:May 76:74

Whetstone, George A.
Utilization and Control of Rivers in the Southwest, WW76:Aug 76:1149

Whinston, Andrew B.
See William D. Haseman, HY3:Mar 75:477:11185

Whitaker, Robert E.
See Robert O. Reid, WW1:Feb 76:61:11926

White, George C.
Dsc, EE5:Oct 74:1188:10836, of "Sewage Chlorination Versus Toxicity -- A Dilemma?", EE6:Dec 73:761:10190

White, Richard N.
An Integrated Approach to Structural Engineering Education at the Undergraduate Level, ST76:Aug 76:1001
Reinforced Concrete Hyperbolic Paraboloid Shells, ST9:Sept 75:1961:11595
Dsc: Victor Gioncu, ST7:July 76:1518:12226
TR:141:425
See Rafael Jimenez, ST76:Aug 76:457
See John F. Grosskurth, Jr., EM6:Dec 76:1025:12641

White, Robert E.
Present and Future Trends in Foundations, Preprint No.2795, Sept 76, 17pp.

White, Stanley M.
See Ole Secher Madsen, WW1:Feb 76:31:11904

White, Thomas D.
See Edward A. Johnson, CE:Apr 76:90

White, Weeks
See Somasundaram Valliappan, NMG:June 76:II-1013

Whitehead, Walter R.
See Raphael G. Kazmann, IR4:Dec 74:413:10991

Whitlock, Phyllis K.
Dsc, White House Fellow, CE:Mar 76:24

Whitman, Ira L.
Environment — 25 Years Ahead, CE:Jan 76:52

Whitman, Robert V.
Consideration of Other Techniques, STN75:Dec 75:II-257
Clo: STN75:Dec 75:II-275
"Earthquake Predictability and Public Policy," by the Panel on the Public Policy Implications of Earthquake Prediction (Book Review), CE:Jan 76:30
Seismic Design Decision Analysis, with John M. Biggs, C. Allin Cornell, John E. Brennan, III, Richard L. de Neufville and Erik H. Vanmarcke, ST5:May 75:1067:11309
TR:141:290
Dsc, 1973, of "Finite Element Versus Elastic Half-Space Representation of Soil Structure Interaction in Seismic Design of Nuclear Facilities", SDNPF:Dec 73:III-19
See E. D'Appolonia, SDNPF:Dec 73:III-19
See Ricardo Dobry, ST5:May 76:1173
See Neville C. Donovan, Preprint No.2805, Sept 76, 19pp.

Whittington, Richard B.
Dsc, with Kamil H.M. Ali, HY3:Mar 76:422:11950, of "Low-Head Air Regulated Siphons", HY3:Mar 75:329:11155

Wicker, Clarence F.
The Port of Philadelphia — Past and Present, Preprint No.2774, Sept 76, 20pp.

Wickramarante, Priya
See Geraldine V. Cox, OE75:June 75:1314

Wicks, Patrick H.
See Milan Synak, EE3:June 75:301:11355

Wickstrom, George V.
See Jane Rodgers, UP1:Aug 76:125:12338

Wiesner, Terence J.
See Harry G. Poulos, TE2:May 75:399:11272

Wiggert, David C.
See Charles Samuel Martin, HY7:July 75:1021:11399

Wight, James K.
Strength Decay of RC Columns under Shear Reversals, with Mete A. Sozen, ST5:May 75:1053:11311
Dsc: Arumbakkam R. Santhakumar and K. S. Ponnusamy, ST3:Mar 76:680:11952; Minoru Yamada, ST4:Apr 76:863:12015
Clo: ST10:Oct 76:2085:12441
TR:141:293

Wik, John D.
Law of Catastrophic Events on Offshore Nuclear Facilities, with Joseph T. Bockrath, OE75:June 75:1455

Wilbourn, J. Phil
SPM Model Testing for Proposed U.S. Superports, Preprint No.2685, Apr 76, 20pp.

Wilder, Carl R.
Dsc, IR4:Dec 75:318:11745, of "Deterioration of Concrete Ditch Liners in Saline-Alkali Soil", IR4:Dec 74:477:10997

Wilder, John J.
Interaction Relationship of Community Development with Government Programs, EI4:Oct 76:471:12502

Wiley, James
See Duncan Ross, OE75:June 75:1169

Wilhelm, William J.
See Roger K. Seals, EI1:Jan 75:37:11044

Wilhoite, Gene M.
Design of Steel Transmission Pole Structures, ST12:Dec 74:2449:11009
Dsc: W. Carl Anderson and Roy J. Mohler, ST10:Oct 75:2184:11601; Frederick B. Dewey and Leon Kempner, Jr., ST11:Nov 75:2439:11675
Clo: ST5:May 76:1153:12093
TR:141:129

Wilke, Douglas A.
Highly Energy Efficient — Wilton Wastewater Treatment Plant, with David R. Fuller, CE:May 76:70

Wilkinson, David L.
Free Surface Slopes at Controls in Channel Flow, HY8:Aug 74:1107:10753
Dsc: Masashi Hom-ma, HY7:July 75:1026:11399; B. S.R. Iyengar, HY7:July 75:1028:11399
Clo: HY3:Mar 76:413:11950
TR:141:114

Wilkinson, Michael C.
See Donald C. Taylor, EI3:July 76:369:12271

Willard, Beatrice E.
Ecological Considerations in Transportation Systems, EI3:July 75:329:11454
TR:141:451

Willardson, Lyman S.
Dsc, IR2:June 75:122:11341, of "Irrigation Management for Salt Control", IR3:Sept 74:321:10822
See Ahmed Y. Hachum, IR2:June 76:179:12204
See Ronald D. Bliesner, IR76:July 76:508

Willeke, Gene E.
Identifying the Publics in Water Resource Planning, WR1:Apr 76:137:12064
Social Aspects of Planning, Preprint No.2754, Sept 76, 22pp.
Theory and Practice of Public Participation in Planning, IR1:Mar 74:75:10391
Dsc: V. Mura Hari, IR1:Mar 75:69:11150
Clo: IR3:Sept 75:226:11536
TR:141:73
Dsc, HY3:Mar 76:450:11950, of "ASCE Urban Water Resources Research Program", HY7:July 75:847:11445

Willetts, Brian B.
Local Erosion Caused by Rapid Forced Infiltration, with Michael E. Drossos, HY12:Dec 75:1477:11796
Dsc: Anand Prakash, HY10:Oct 76:1609:12440
TR:141:483

Williams, Brian J.
Two-Dimensional Mathematical Water Quality Model, with Jon B. Hinwood, EE1:Feb 76:149:11947

Williams, David R., Jr.
Five Decades of Progress in Pipelining, CO4:Dec 75:751:11770
TR:141:498

Williams, Geoffrey M.J.
Experience with Computer-Aided Drafting System, ST4:Apr 75:649:11224
TR:141:239

Williams, Jimmy R.
Water Yield Model Using SCS Curve Numbers, with William V. LaSeur, HY9:Sept 76:1241:12377

Williams, Melvin C.
See Thor L. Anderson, CO1:Mar 76:81:11971

Williams, Theodore T.
Water Conflicts in Western Coal Development, WR2:Nov 76:327:12562
See Lee Robinson, HY10:Oct 72:1773:9294

Williamson, Thomas G.
Bibliography on Timber Highway Bridge Design, ST1:Jan 75:1:11042
TR:141:138

Willis, Byron H.
Research Needs Relative to Environmental Data, HY11:Nov 75:1423:11700
TR:141:474

Willis, Homer B.
Federal Legislation and Activities for Dam Safety, EFRLD:Sept 75:5

Willis, Robert
Steady-State Water Quality Modeling in Streams, with Donald R. Anderson and John A. Dracup, EE2:Apr 75:245:11246
TR:141:294

Willis, William W.
See James E. Cowley, WW76:Aug 76:1610

Wilson, Basil W.
Six-Degrees-of-Freedom Motions, Moored Ship in Waves, OE75:June 75:646

Wilson, Charles
Dsc, CE's—Surplus?, CE:July 76:36

Wilson, Edward H.
Dsc, HY7:July 75:1032:11399, of "Surface Shear Waves", HY9:Sept 74:1215:10809

Wilson, Edward L.
Dsc, with P. J. Hollings, ST1:Jan 76:298:11819, of "Linear Structural Analysis of Multistory Buildings", ST3:Mar 75:551:11163

Wilson, Eugene M.
See Stanley D. Peterson, TE4:Nov 76:847:12547

Wilson, James H.
See Marshall L. Silver, GT5:May 76:511:12145

Wilson, John L.
Dsc, with Sidney Shore, ST2:Feb 75:441:11089, of "Skew and Elevated Support Effects on Curved Bridges", ST7:July 74:1379:10670
See Lynn W. Gelhar, EM5:Oct 75:718:11598

Wilson, Kenneth C.
See W. Edgar Watt, IR76:July 76:580

Wilson, Mark King, Jr.
Memoir of, TR:141:554

Wilson, Woodrow W.
Past and Future of Contract Administration, CO3:Sept 75:559:11560
TR:141:380
See Stephen E. Smith, CO4:Dec 75:907:11776

Windom, Herbert L.
See William M. Dunstan, WW3:Aug 75:269:11530

Winkelman, Henry
See James Falick, Preprint No.2701, Apr 76, 23pp.

Winkle, Roy
Liability Considerations in State Dam Permit and Inspection Programs (A Look at Ohio's Program), EFRLD:Sept 75:113

Winkley, Brien R.
Response of the Mississippi River to the Cutoffs, WW76:Aug 76:1267
See James F. Ruff, WW2:May 76:189:12150

Winstead, Ted L.
Liner Anchorage Analysis for Nuclear Containments, with Edwin G. Burdette and Daryl R. Armentrout, ST10:Oct 75:2103:11635
TR:141:445

Winter, Donald F.
See Carl E. Pearson, HY3:Mar 76:367:11990

Winter, Ernest
Dsc, with Alvaro Rodriguez, GT75:June 75:II-271, of "In Situ Measurement of Initial Stress and Deformation Characteristics", GT75:June 75:II-181

Winter, George
See John T. DeWolf, ST10:Oct 74:2017:10875
See Shien T. Wang, ST11:Nov 75:2337:11724
See V. Kalyanaraman, Preprint No.2807, Sept 76, 38pp.

Winters, Leon
See John R. Banister, GT10:Oct 76:1073:12471

Wirsching, Paul H.
Preliminary Dynamic Assessment of Deepwater Platforms, with Peter H. Prasthofer, ST7:July 76:1447:12264
A Probabilistic Design Approach Using the Palmgren-Miner Hypothesis, with James T.P. Yao, ST76:Aug 76:324

Wischmeier, W. H.
See M. H. Frere, Preprint No.2667, Apr 76, 24pp.

Wisner, Paul E.
Removal of Air from Water Lines by Hydraulic Means, with Farrukh N. Mohsen and Nicholas Kouwen, HY2:Feb 75:243:11142
Dsc: Walter A. Mechler, HY3:Mar 76:420:11950
Errata: HY9:Sept 75:11535
Errata: HY10:Oct 75:11600
Clo: HY11:Nov 76:1695:12508
TR:141:235
Selection of Models for Urban Drainage Problems: Technical Aspects and Non-Technical Constraints, with Adel F. Ashmalla and Patrick A. Ahern, IR76:July 76:246
See Jiri Marsalek, HY8:Aug 75:1101:11470
See Michael R. Garrett, WW76:Aug 76:650

Wissa, Anwar E.Z.
See Raymond J. Krizek, GT12:Dec 74:1275:11030

Witczak, Matthew W.
Full-Depth Asphalt Airfield Pavements, with James F. Shook, TE2:May 75:297:11331

TR:141:252

Witheford, David K.
Parking and Zoning, UP1:May 75:1:11294
TR:141:166

Withiam, James L.
Undrained Volume Changes in Compacted Cohesive Soil, with Fred H. Kulhawy, GT10:Oct 76:1029: 12483
See Fred H. Kulhawy, GT7:July 75:702:11398

Witt, Michael
See Robert Siegrist, EE3:June 76:533:12200

Wittke, Walter
See Manfred Wallner, NMG:June 76:II-1119
3-D Finite Element Analysis of a Dam Foundation, with Stephen Semprich, NMG:June 76:III-1385
3-D Stability Analysis of Tunnels in Jointed Rock, with Bernd Pierau, NMG:June 76:III-1401

Wittwer, S. H.
Communication Goals for Science and Engineering, EI2:Apr 76:183:12087

Woelke, Charles E.
See Rick D. Cardwell, DIEE:Jan 76:684

Wojick, David E.
The Engineering Computer Revolution—Over or Just Beginning, EI3:July 76:351:12276

Wolbert, Allan L.
See Subrata K. Chakrabarti, WW2:May 76:203:12140

Wolchuk, Roman
Stress Cycles for Fatigue Design of Railroad Bridges, with Ronald M. Mayrbaurl, ST1:Jan 76:203:11857
Dsc: William G. Byers, ST10:Oct 76:2096:12441; Dan S. Bechly, ST12:Dec 76:2392:12588; J. E. Spindel, ST12:Dec 76:2393:12588; Pedro Albrecht, ST12:Dec 76:2394:12588
Dsc, with Ronald M. Mayrbaurl, ST12:Dec 74:2525: 10977, of "Commentary on Orthotropic-Deck Bridge Specifications", ST1:Jan 74:109:10273

Wolff, Reinhard
Dsc, GT8:Aug 75:829:11469, of "Studies on Anchored Flexible Walls in Sand", GT10:Oct 74: 1107:10854

Wolfkill, Albert J.
See Joseph R. Reed, WW76:Aug 76:1159

Wolniak, Edward Joseph
Memoir of, TR:141:555

Wolofsky, Leib
See James D. Gill, GT76:Aug 76:82

Wong, Ben Y.C.
See Roberta H. Ewald, EI2:Apr 75:175:11228

Wong, Hung L.
Influence of Canyon on Soil-Structure Interaction, with Mihailo D. Trifunac and Kevin K. Lo, EM4: Aug 76:671:12328

Wong, Robert T.
Cyclic Loading Liquefaction of Gravelly Soils, with H. Bolton Seed and Clarence K. Chan, GT6:June 75:571:11396
TR:141:346

Woo, Dag-Cheng
Dsc, HY4:Apr 76:544:12014, of "Dimensionless Inlet Hydrograph Model", HY9:Sept 75:1185:11580

Wood, Brian R.
Column Design by P Delta Method, with Denis Beaulieu and Peter F. Adams, ST2:Feb 76:411: 11936
Dsc: Albert J. Gouwens, ST10:Oct 76:2099:12441

Further Aspects of Design by PΔ Model, with Denis Beaulieu and Peter F. Adams, ST3:Mar 76:487: 11973
Dsc: William E. Edwards, ST12:Dec 76:2398: 12588

Wood, Ian R.
See Robert J. Keller, HY4:Apr 74:553:10501

Wood, Jewell T.
Public Affairs in the Civil Engineer: A Guideline for Accomplishment, EI3:July 76:339:12262

Wood, Stuart, Jr.
See Franklin J. Larkin, CO2:June 75:309:11391

Woodhead, H. Roger
Torsional Strength of Prestressed Concrete Beams, with Arthur E. McMullen, ST5:May 74:881:10545
Dsc: Himat T. Solanki, ST12:Dec 74:2529:10977; Ganpat S. Pandit, ST3:Mar 75:610:11151
Clo: ST10:Oct 75:2181:11601
TR:141:58

Woods, Chris F.
Management Processes and Their Affect on Productivity, PROD:Aug 76:113

Woods, Richard D.
See Donald G. Anderson, GT11:Nov 74:1254:10897
See Donald G. Anderson, GT5:May 76:525:12147

Woodward, Donald E.
Dsc, IR3:Sept 75:245:11536, of "Estimation of Rainfall Erosion Index", IR3:Sept 74:293:10817

Woodward, James H.
See Anton W. Wegmuller, ST1:Jan 76:231:11863
See Ollie L. Vance, TN: EM2:Apr 76:377:12017

Woolcock, Scott T.
Post-Buckling of Redundant I-Beams, with Nicholas S. Trahair, EM2:Apr 76:293:12054
Post-Buckling of Redundant Rectangular Beams, with Nicholas S. Trahair, EM4:Aug 75:301:11491
Dsc: Ernest F. Masur, EM3:June 76:585:12162
TR:141:280

Woolhiser, David A.
See M. H. Frere, Preprint No.2667, Apr 76, 24pp.

Woolley, Fred K.
Dsc, Escalera, CE:May 76:30

Woolworth, Robert S.
See Donald J. Murphy, GT3:Mar 75:279:11179

Wormleaton, Peter Richard
Dsc, HY3:Mar 76:438:11950, of "Nonlinear Channel Routing by Computer", HY6:June 75:651:11353

Worstell, Robert V.
Estimating Seepage Losses from Canal Systems, IR1: Mar 76:137:11960

Wortley, C. Allen
Proposed Professional Advancement Recognition (PAR) Program, EI1:Jan 76:117:11861
Dsc: Robert T. Ratay, EI4:Oct 76:485:12437
Dsc, EI1:Jan 75:46:11036, of "Present and Future Directions in Design Education", EI1:Jan 75:37: 11044
Dsc, EI1:Jan 76:26, of "Engineering Educator-Practitioner Interchange: Challenge", EI1:Jan 76:21: 11865
See John P. Klus, EI3:July 75:419:11428

Wortman, Robert H.
Bikeway Hazards, BP75:Dec 75:320

Wozniak, D.
Water to Air Bacterial Transfer by Bursting Bubbles, with M. Kiwak, C. Cahoon and Robert H. Edgerton, EE3:June 76:567:12197

Wright, Benjamin
Benjamin Wright: Father of American Civil Engineering, CE:Apr 76:9

Wright, Everald V.
Concrete Structures for Subsea Oil Recovery — Design Considerations, with Marcel Gerbault, Preprint No.2675, Apr 76, 21pp.

Wright, Fred D.
See Ashok K. Chugh, ST11:Nov 75:2405:11738

Wright, Jim
Dsc, CE:Nov 75:32, on US Water Cleanup Program Speeds Up—But Still Much Red Tape, CE:Aug 75:71

Wright, John M.
Pedestrian Versus Bicycle Versus Automobile — A Case Study, BP75:Dec 75:172

Wright, Kenneth R.
Land Use and Flood Management, with Ruth M. Wright, WW76:Aug 76:147
Professional Engineers as Elected Local Officials, with Douglas T. Sovern, El4:Oct 76:447:12504
The Recycling of a River, with William C. Taggart, CE:Nov 76:42
Sewage Effluent Turned to Snow: Provides Storage, Removes Pollutant, CE:May 76:88
Dsc: Sherwood C. Reed, CE:Sept 76:32

Wright, Peter M.
See Emil O. Frind, ST4:Apr 75:937:11236

Wright, Ruth M.
See Kenneth R. Wright, WW76:Aug 76:147

Wroth, C. Peter
In Situ Measurement of Initial Stress and Deformation Characteristics, GT75:June 75:II-181
Dsc: Francois Baguelin and Jean-Francois Jezequel, GT75:June 75:II-231; Vincent P. Drnevich, GT75:June 75:II-244; Nilmar Janbu, GT75:June 75:II-253; S. Marchetti, GT75:June 75:II; K. Rainer Massarsch, Bengt B. Broms and Robert D. Holtz, GT75:June 75:II-260; Francois A. Tavenas, GT75:June 75:II-263; Ernest Winter and Alvaro Rodriguez, GT75:June 75:II-271
Clo: GT75:June 75:II-274
See Hideki Ohta, NMG:June 76:I-319

Wu, Chian-Min
Movable-Bed Flow Routing in Open Channel and Its Calibration, WW76:Aug 76:36
Dsc, HY6:June 76:799:12164, of "Hydraulic Design of Vertical Stilling Wells", HY7:July 75:801:11451

Wu, Han-Chin
Dual Failure Criterion for Plain Concrete, EM6:Dec 74:1167:10996
Dsc: Jeremy Isenberg, EM4:Aug 75:497:11468; Krishnaiyengar Rajagopalan, EM6:Dec 75:912:11742
Clo: EM3:June 76:577:12162
TR:141:148

Wu, I-pai
Design of Drip Irrigation Main Lines, IR4:Dec 75:265:11803
Dsc: Roland P. Perold, IR3:Sept 76:395:12365
TR:141:516
See Kwang-Ping Yang, HY1:Jan 75:167:11080

Wu, Lung-Hsiang
Curvilinearly Corrugated Plates in Shear, with Charles Libove, ST11:Nov 75:2205:11714
Errata: ST10:Oct 76:2088:12441
TR:141:467

Wu, Song S.
Structural Response to Wave and Current Forces, with Chi C. Tung, OE75:June 75:849

Wu, Tien H.
Stability of Embankment on Clay, with William B. Thayer and Sheng S. Lin, GT9:Sept 75:913:11584
Dsc: James V. Hamel, GT5:May 76:574:12091
TR:141:447
See Vijay K. Khosla, GT4:Apr 76:303:12079
See Chandrakant S. Desai, NMG:June 76:I-306

Wu, Yeun C.
Role of Nitrogen in Activated Sludge Process, EE5:Oct 76:12454
Yeast Plant Wastewater Treatment, with Chiao F. Kao, EE5:Oct 76:969:12468

Wuebben, James L.
See Guenther E. Frankenstein, WW76:Aug 76:1487

Wuellner, Larry
Education and Enforcement — The Sine Qua Non of the New Traffic-Mix, BP75:Dec 75:548

Wunderlich, Walter O.
See Jean-Pierre Granju, WW76:Aug 76:65

Wyatt, George M.
See Robert F. Piest, HY1:Jan 75:65:11069

Wyatt, Martin J.
Truncation Error Control in Generalized Finite Element Method, with Gwynne Davies and Cyril Snell, TN: EM4:Aug 76:736:12286

Wylie, E. Benjamin
Characteristics Method for Liquefaction of Soils, with Victor L. Streeter, NMG:June 76:II-938
One-Dimensional Soil Transients by Characteristics, with Victor L. Streeter, NMG:June 76:I-151
Seismic Response of Reservoir-Dam Systems, HY3:Mar 75:403:11184
Dsc: Hung Tao Shen, P. Rao Manam and Wen Huang, HY1:Jan 76:106:11817
Errata: HY7:July 76:1064:12225
Clo: HY8:Aug :1141:12280
TR:141:267
Transient Aquifer Flows by Characteristics Methods, HY3:Mar 76:293:12001

Xirodimas, Dimitrios P.
See Narendra K. Saxena, SU1:Dec 76:53:12642

Yachnis, Michael
Fifty-Year Development of Naval Facilities Construction, CO1:Mar 75:15:11175
TR:141:160

Yalamanchili, Rao
Experiments for Accuracy and Stability of Heat Conduction, NMG:June 76:I-93

Yamada, Minoru
Dsc, ST4:Apr 76:863:12015, of "Strength Decay of RC Columns under Shear Reversals", ST5:May 75:1053:11311

Yamagami, Takuo
See Eiichi Oda, NMG:June 76:II-847

Yamaguchi, Hakuju
On an Improved Application of Kotter's Equation, with Tsutomu Kimura and Nariaki Fuji-i, NMG:June 76:I-183

Yamamoto, Tokuo
Forces on Many Cylinders Near a Plane Boundary, with John H. Nath, Preprint No.2633, Apr 76, 19pp.
Hydrodynamic Forces on Multiple Circular Cylinders, HY9:Sept 76:1193:12395
Wave Forces on Cylinders Near Plane Boundary, with John H. Nath and Larry S. Slotta, WW4:Nov 74:345:10944
Dsc: Subrata K. Chakrabarti and Dennis C. Cotter, WW3:Aug 75:303:11473; Robert A. Grace, WW3:Aug 75:305:11473

Clo: WW2:May 76:275:12095
TR:141:182

Yamamoto, Yoshiaki
See Shunsuke Sakurai, NMG:June 76:II-821

Yancey, Thomas N., Jr.
Disaster-Caused Increases in Construction Costs, with James L. Douglas and D. Earl Jones, Jr., CE: Sept 76:94
Disaster Caused Increases in Unit Repair Cost, with L. Douglas James, D. Earl Jones, Jr. and Jeanne Goedert, WR2:Nov 76:265:12564

Yandle, Bruce
Distributing Public Housing Resources, with George Biediger, UP2:Nov 75:147:11689
TR:141:521

Yang, Cheng Y.
Extreme Wind, Wave and Tide, with Mehmet Aziz Tayfun and M. H. Fallah, OE75:June 75:134

Yang, Chih Ted
Applicability of Unit Stream Power Equation, with John B. Stall, HY5:May 76:559:12103
Dsc: Frederic T. Mavis, HY12:Dec 76:1790:12586
Minimum Unit Stream Power and Fluvial Hydraulics, HY7:July 76:919:12238

Yang, Jann-Nan
Application of Optimal Control Theory to Civil Engineering Structures, EM6:Dec 75:819:11812
TR:141:511
Approximation to First Passage Probability, EM4: Aug 75:361:11502
TR:141:302
Diffusion of Probability Mass and First Passage Probability, EM5:Oct 75:639:11654
TR:141:452
Random Vibration of a Compliant Wall, with Robert A. Heller, Preprint No.2687, Apr 76, 28pp.
Random Vibration of a Compliant Wall, with Robert A. Heller, EM6:Dec 76:1041:12640

Yang, Kwang-Ping
Design of Conduit System with Diverging Branches, with Tung Liang and I-Pai Wu, HY1:Jan 75:167:11080
TR:141:211

Yang, Tung H.
Buckling of Axially Loaded Open Shells, with Sidney A. Guralnick, EM2:Apr 76:199:12055
Dsc: Carlos A. Prato, EM6:Dec 76:1100:12584

Yang, Zen
Dynamic Response of Tropical Marine Limestone, with Allen W. Hatheway, GT2:Feb 76:123:11893

Yao, James T.P.
See Thomas L. Paez, EM1:Feb 76:105:11914
See Paul H. Wirsching, ST76:Aug 76:324

Yao, Kuan M.
Extended Plain Sedimentation, EE3:June 75:413:11392
TR:141:358
Sewer Line Design Based on Critical Shear Stress, EE2:Apr 74:507:10480
Dsc: Ananthakrishnan Sundar and H. F. Cheong, EE1:Feb 75:179:11085
Clo: EE4:Aug 75:668:11467
TR:141:90

Yaremko, E. K.
See Thomas Blench, WW76:Aug 76:1363

Yaron, Dan
See Daniel Shimshi, IR1:Mar 75:1:11170
See Gad Strateener, IR1:Mar 75:13:11169

Yatsuzuka, Mashio
See Tanehiro Futagami, HY7:July 76:881:12244

Yee, Peter P.
See Arthur W. Brune, HY12:Dec 75:1519:11801

Yegian, Mishac K.
Dsc, with Issa S. Oweis, GT3:Mar 76:265:11949, of "Liquefaction and Cyclic Mobility of Saturated Sands", GT6:June 75:551:11388

Yeh, Chang-hua
Stability and Dynamic Analyses of Cooling Tower, with William Y.J. Shieh, PO2:Nov 73:339:10141
Dsc: John F. Abel and David P. Billington, PO2: Dec 74:209:10976; Kenneth P. Burchert, PO2: Dec 74:211:10976
Errata: PO1:July 74:136:10636
Clo: PO1:July 75:134:11400
TR:141:123
Dsc, with William Y.J. Shieh, ST1:Jan 76:301:11819, of "Buckling of Cooling-Tower Shells: State-of-the-Art", ST6:June 75:1185:11364

Yeh, Gour-Tsyh
Three-Dimensional Pollutant Modeling in Shear Flow, HY3:Mar 76:351:12005

Yeh, Sheng S.
See Shien T. Wang, ST6:June 74:1169:10595

Yeh, William Wen-Gong
Aquifer Parameter Identification, HY9:Sept 75:1197:11582
TR:141:440

Yeh, William W-G.
See Leonard Becker, WR1:Apr 76:101:12062

Yen, Ben Chie
Design of Storm Sewer Networks, with Ahmet Suha Sevuk, EE4:Aug 75:535:11503
TR:141:371
Flood Routing Through River Junctions, with A. Osman Akan, WW76:Aug 76:212
Open-Channel Flow Equations Revisited, EM5:Oct 73:979:10073
Dsc: J. D. Lin, EM5:Oct 74:1055:10837; Himat T. Solanki, EM5:Oct 74:1058:10837; Dinshaw N. Contractor, EM5:Oct 74:1059:10837
Clo: EM4:Aug 75:485:11468
TR:141:22
Risk-Safety Factor Relation for Storm Sewer Design, with Wilson H. Tang, TN: EE2:Apr 76:509:12016
Dsc, HY1:Jan 75:199:11038, of "Factors Determining Bed Forms of Alluvial Streams", HY3:Mar 74:363:10396
Dsc, HY1:Jan 75:202:10038, of "Numerical Model of St. Lawrence River Estuary", HY4:Apr 74:517:10472
Dsc, with Ahmet Suha Sevuk, HY2:Feb 75:317:11088, of "Transient Control in Lower Sacramento River", HY3:Mar 74:405:10418
Dsc, with Ahmet Suha Sevuk, HY6:June 75:786:11340, of "Simulation Accuracies of Gradually Varied Flow", HY7:July 74:1011:10677
Dsc, HY5:May 76:688:12092, of "Shear Distribution in Bends in Rectangular Channels", HY8:Aug 75:1053:11513
See Wilson H. Tang, EE3:June 75:381:11360

Yen, Ben T.
See Robert E. McDonald, ST1:Jan 76:35:11850
See Cetin Yilmaz, ST76:Aug 76:1023

Yen, Bing C.
Geotechnical Input for Deep-Water Pipelines, with R. Leonard Allen and Harry H. Shatto, OE75:June 75:504
Sanitary Landfill Settlement Rates, GT5:May 75:475:11335
Dsc: George F. Sowers, GT6:June 76:653:12163
TR:141:313

Yen, Chin-lien
Dsc, HY10:Oct 75:1367:11600, of "Flow and Bed Topography in Channel Bends", HY11:Nov 74: 1631:10963

Yevjevich, Vujica
See J. Peter Jolly, HY7:July 74:1011:10677

Yilmaz, Cetin
Elastic Analysis of Rectangular Box Girders by Finite Element Method, with Ben T. Yen, ST76: Aug 76:1023
See Robert E. McDonald, ST1:Jan 76:35:11850

Yiu, Chris S.C.
Design Considerations in Long Span Steel Bridges, with Man-Chung Tang, Preprint No.2785, Sept 76, 30pp.

Yoder, Charles W.
Dsc, EI2:Apr 75:253:11268, of "Effectiveness of Present Operating Procedures and of the PAC Structure", EI2:Apr 75:247:11268

Yokel, Felix Y.
Failure Hypothesis for Masonry Shear Walls, with S. George Fattal, ST3:Mar 76:515:11992
A Performance Standard for Foundations and Excavations, CE:Oct 76:80

Yokota, R.
See Guenther E. Frankenstein, WW76:Aug 76:1487

Yong, Raymond N.
Cone Penetration of Granular and Cohesive Soils, with Choong-Kong Chen, EM2:Apr 76:345:12081

Yoon, Tae Hoon
Dsc, HY8:Aug 75:1099:11470, of "Multiple Linearization Flow Routing Model", HY7:July 74: 1031:10668

York, David W.
Modeling Water-Related Recreation Benefits, with Lawrence W. Gahan and Benjamin C. Dysart, III, TN: WR2:Nov 76:409:12577

Yoshimura, Takeshi
See Yasuharu Nakamura, EM4:Aug 76:685:12327

Yost, Edward
Satellite Measurements of Turbidity of Coastal Waters, OE75:June 75:1170

Yotsukura, Nobuhiro
See Robert E. Fish, IR76:July 76:481

You, Kuang-Wei
See Kuan-Chen Fu, ST76:Aug 76:1049

Youd, T. Leslie
Liquefaction during 1906 San Francisco Earthquake, with Seena N. Hoose, GT5:May 76:425:12143

Young, Arthur W.
See Neal B.H. Benjamin, CO1:Mar 75:183:11180

Young, Der-Liang
Steady Stratified Circulation in a Cavity, with James A. Liggett and Richard H. Gallagher, EM1:Feb 76: 1:11903
Unsteady Stratified Circulation in a Cavity, with James A. Liggett and Richard H. Gallagher, EM6: Dec 76:1009:12643

Young, George K.
Environmental Data Management, with G. F. Tierney, WR2:Nov 76:255:12559

Young, George K., Jr.
Optimal Design for Highway Drainage Culverts, with Mitchell R. Childrey and Roy E. Trent, HY7:July 74:971:10676
Dsc: Emmett M. Laursen, HY2:Feb 75:321: 11088; Sie Ling Chiang, HY6:June 75:784: 11340; A. G. Spafford and Charles D.D. Howard, HY9:Sept 75:1282:11535
TR:141:102

Young, James C.
See Robert F. Roskopf, EE5:Oct 76:1005:12460

Young, Peter
See Bruce Beck, EE5:Oct 76:909:12461

Young, William H.
See Haywood G. Dewey, Jr., PO2:Nov 73:405:10169

Youngs, E. G.
Dsc, IR1:Mar 75:73:11150, of "Subsurface Drainage Solutions by Galerkin's Method", IR1:Mar 74:1: 10397

Youngstrom, Mark P.
See William C. Anderson, EE6:Dec 76:1239:12626

Yu, Jason C.
Processing Variable Forms for Travel Estimation, with Robert J. Popper, TE1:Feb 76:91:11938
See William D. Klink, TE4:Nov 75:639:11710

Yucel, Oner
Wall Shear Measurment in Sand-Water Mixture Flows, with Walter H. Graf, HY7:July 75:947: 11453
Errata: HY5:May 76:687:12092
TR:141:388
See Millard P. Robinson, Jr., WW1:Feb 76:97:11882

Yucel, Vefa
See Catalino B. Cecilio, HY10:Oct 74:1329:10851

Yudhbir
Stress-Path Dependent Deformation Moduli of Clay, with A. Varadarajan, GT3:Mar 75:315:11198
Errata: GT3:Mar 76:264:11949
TR:141:268

Zaghloul, Samir A.
Nonlinear Analysis of Unsymmetrically Laminated Plates, with John B. Kennedy, EM3:June 75:169: 11345
TR:141:222

Zagni, Anthony F.E.
Channel Flow Over Permeable Beds of Graded Spheres, with Kenneth V.H. Smith, HY2:Feb 76: 207:11892

Zahorcak, Claudia S.
See Donald J. O'Connor, EE2:Apr 75:280:11205

Zajic, James E.
See Yishu Chu, TN: EE5:Oct 76:1109:12442

Zakaria, Thabet
Analysis of Urban Transportation Criteria, TE3:Aug 75:521:11496
TR:141:332

Zakic, Borislav D.
Inelastic Behavior of Wood Beam-Columns, ST2:Feb 75:417:11145
Errata: ST12:Dec 75:2681:11746
TR:141:199

Zambo, Paul W.
Planning the Successful Pedestrian Mall: The Allentown Mall, BP75:Dec 75:109

Zandi, Iraj
See Bruce Thompson, EE1:Feb 75:41:11113

Zanoni, Alphonse E.
Column Settling Tests for Flocculant Suspensions, with Marshall W. Blomquist, EE3:June 75:309: 11356

Dsc: P. Krishnan, EE1:Feb 76:227:11876
Clo: EE5:Oct 76:1125:12436
TR:141:306
Phosphorus Uptake by Biological Slimes, EE6:Dec 76:1229:12621

Zarrella, Dominic A.
See Robert C. Johnston, Preprint No.2710, Apr 76, 28pp.
See Robert C. Johnston, GT12:Dec 76:1209:12624

Zbinden, Ernest
See Claude Cossette, CO1:Mar 75:155:11186

Zdeb, J. J.
See R. D. Walker, Preprint No.2677, Apr 76, 30pp.

Zecher, Sidney
An Engineer Rebuts a Contractor's Charges of Unfair Contracts, CE:Oct 75:75
Dsc: Robert F. Borg, CE:Jan 76:24; Maynard Charles Nugent, CE:Jan 76:24; Richard C. Zirbel, CE:Jan 76:26
TR:141:417
Dsc, CE:Oct 75:75, on Are Contractors Treated Fairly?, CE:May 75:56

Zeidler, Ryszard B.
Coastal Dispersion of Pollutants, WW2:May 76:235:12121

Zellner, Wilhelm
Germany Constructs Steel Box Girder Landmark, CE:Apr 75:61
TR:141:155

Zeman, Ales J.
See Alena Mudroch, WW2:May 75:201:11317

Zendehrouh, Samad
A Structural Design Decision Methodology for Nuclear Power Plants, with Masanobu Shinozuka, ST76:Aug 76:517

Zetlin, Lev
Field Problems of Latticed Structures, with Joseph F. Thelen and Daniel A. Cuoco, ST11:Nov 75:2241:11711
TR:141:461

Zia, Paul
See David W. Johnston, ST7:July 75:1313:11421

Zienkiewicz, Olgierd C.
Plasticity and Some of Its Corollaries in Soil Mechanics. Collapse and Continuing Deformation Under Load Repetition, NMG:June 76:III-1275
See Roland W. Lewis, NMG:June 76:II-1106

Zimmerman, Roger M.
See John W. Hernandez, Preprint No.2796, Sept 76, 10pp.

Zimmie, Thomas F.
Evaluation of a Bedload Sediment Sampler for USA-Canada Watershed Studies, with Young S. Paik and Carsten H.L. Floess, IR76:July 76:40
Dsc, EE2:Apr 75:278:11205, of "Recommendations for Environmental Engineering Education", EE2:Apr 74:243:10459

Zirbel, Richard C.
Dsc, CE:Jan 76:26, on An Engineer Rebuts a Contractor's Charges of Unfair Contracts, CE:Oct 75:75

Zolkov, Elias
Dsc, GT10:Oct 76:1128:12439, of "Statistics of Liquefaction and SPT Results", GT11:Nov 75:1135:11701

Zollo, Ronald F.
Fiber Reinforced Concrete Extrusion, ST12:Dec 75:2573:11798
TR:141:512

Zuk, William
How Almost Anyone Can Design a Good Looking Bridge in One Easy Lesson, ST76:Aug 76:19
Dsc, ST9:Sept 75:1993:11537, of "Tendon Control in Tall Structures", ST3:Mar 75:505:11168

Zulfacar, Asadullah
Vegetation and Urban Environment, UP1:May 75:21:11283
TR:141:101